OCTOBER 12, 1953

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RAILWAY AGE

NEWS ISSUE

The Standard Railroad WEEKLY for Almost a Century

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Improve DROP DOOR OPERATION . . .

EASIER CLOSING
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POSITIVE FIT . . .

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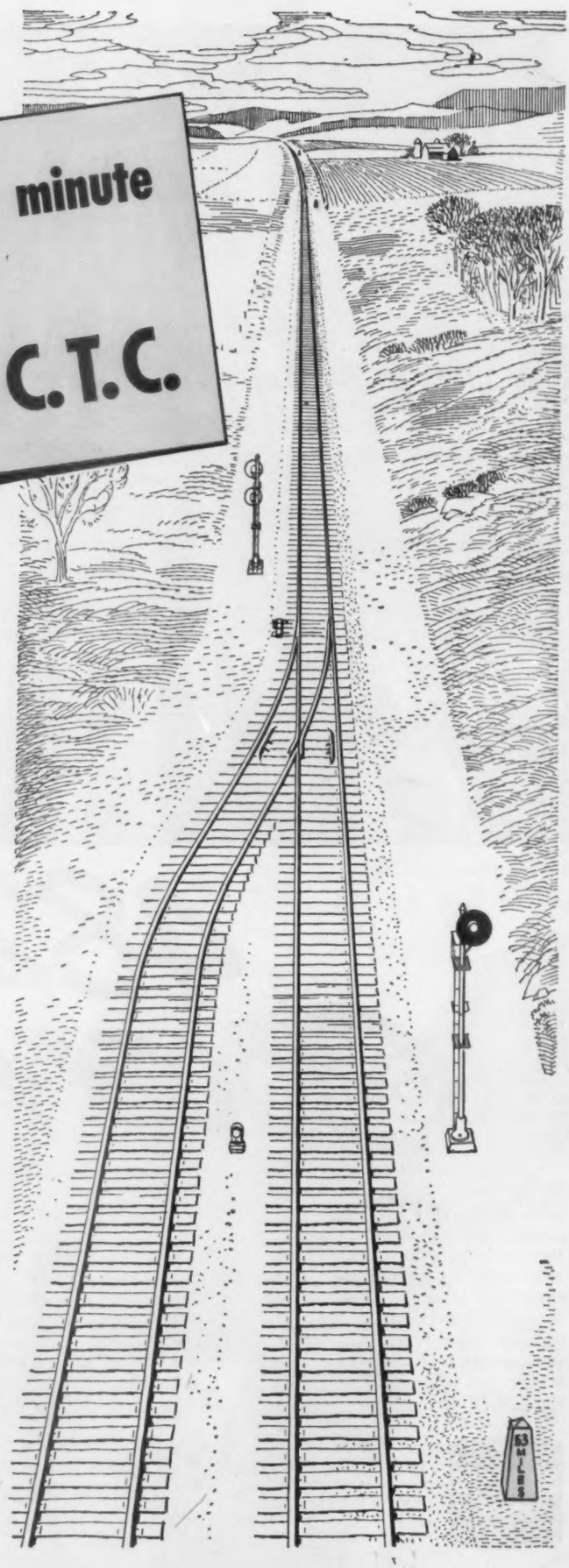

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RAILWAY AGE

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Oct. 12, 1953 NEWS ISSUE Vol. 135, No. 15

Week at a Glance

Carloading forecasts for the fourth quarter of 1953 have been released by the 13 Shippers Advisory Boards. In the aggregate, loadings are expected to show almost no change from the final quarter of last year. 9

Net income of Class I roads is up $137 million for the first eight months of this year as compared to the same 1952 period, but the net for August was only a shade over that month last year. 11

Insulated cars keep wet wood pulp from freezing. This novel development by the Chicago & North Western releases refrigerator cars for other service and affords greater cubic capacity for cars handling this commodity. 15

"Never underestimate the power of a woman," says the publicity. One of the ladies tells the railroads how she would get women travelers and the women active in community affairs to help solve railroad passenger service problems. 18

FORUM: "Big railroaders," that is, railroad men who aren't satisfied just to do the job assigned to them a little better but who contribute to keeping the railroad industry a dynamic industry—they are the true bulwark of steady railroad progress. 23

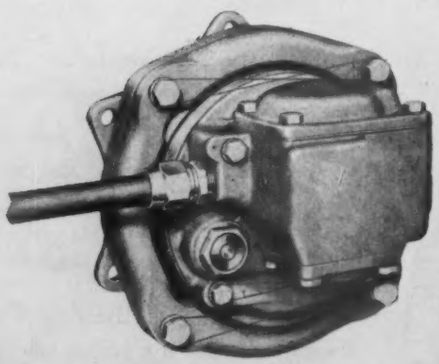
Questions and Answers for the transportation department, is a regular bi-weekly feature. 24

Railway purchases for the first seven months of this year continued closely parallel to last year's high-level activity. 25

Longest welded rail haul was successfully accomplished by the Northern Pacific, which moved strings 2,400 ft. in length over 889 miles of tortuous terrain. 27

Reduce the need for wheel turning with this reliable anti-wheel-slip device

the Westinghouse AP Mechanical Pneumatic Decelostat® Controller for passenger cars



Westinghouse Air Brake COMPANY

AIR BRAKE DIVISION WILMERDING, PA.

Current Statistics

Operating revenues, eight months	
1953	$ 7,177,891,292
1952	6,810,999,610
Operating expenses, eight months	
1953	$ 5,413,718,323
1952	5,298,347,702
Taxes, eight months	
1953	$ 862,075,835
1952	780,695,887
Net railway operating income, eight months	
1953	$ 744,916,284
1952	613,069,838
Net income, estimated, eight months	
1953	$ 572,000,000
1952	435,000,000
Average price railroad stocks	
October 6, 1953	56.88
October 7, 1952	62.64
Carloadings revenue freight	
Thirty-nine weeks, 1953	29,068,039
Thirty-nine weeks, 1952	28,017,896
Average daily freight car surplus	
October 3, 1953	7,246
October 4, 1952	2,644
Average daily freight car shortage	
October 3, 1953	5,393
October 4, 1952	16,199
Freight cars delivered	
August 1953	5,557
August 1952	4,537
Freight cars on order	
September 1, 1953	45,735
September 1, 1952	95,761
Freight cars held for repairs	
September 1, 1953	97,013
September 1, 1952	108,222
Average number of railroad employees	
Mid-August, 1953	1,234,994
Mid-August, 1952	1,221,473

RAILWAY AGE IS A MEMBER OF ASSOCIATED BUSINESS PUBLICATIONS (A.B.P.) AND AUDIT BUREAU OF CIRCULATION (A. B. C.) AND IS INDEXED BY THE INDUSTRIAL ARTS INDEX AND BY THE ENGINEERING INDEX SERVICE. RAILWAY AGE INCORPORATES THE RAILWAY REVIEW, THE RAILROAD GAZETTE, AND THE RAILWAY AGE GAZETTE.

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Week at a Glance CONTINUED

Freight operating statistics of large railroads for July 1953 and 1952, just released by the I.C.C., appear in this issue. Publication of these monthly figures, initiated years ago by *Railway Age*, has been resumed at the request of many readers. 30

Twenty Questions isn't a game in this case; it's a serious petition to the I.C.C. to take appropriate action to clear up uncertainties as to the relationships between railroads and highway carriers in trailers-on-flats operations. 34

BRIEFS

Railway Age Essay Contest was announced in the September 28 issue, page 25. Every subscriber has a chance to win $100. Entries must be mailed by November 26.

Changes in size and weight laws regarded as favorable to one or more segments of the trucking industry have been enacted so far this year in at least 18 states; rejected in seven, and vetoed in one. Size-weight changes which would have been unfavorable to truckers were rejected in the only four states where they were proposed. A trend toward heavier penalties for truck overload violations continued, however, penalties being stiffened in at least eight states and eased in only one.

Walkie-talkie units have found a niche in public relations work on the Chicago & North Western. When the department is taking photographs of trains at scenic locations where the camera must be at some distance from the subject, the photographer gives spotting instructions, etc., over the air to an assistant near the locomotive. The idea has enabled the road to take scenic pictures of this kind with a minimum of delay to scheduled services.

Passenger revenue sagged in the first half of 1953. Revenue from coach service ($226,172,717) was down 5.8 per cent from 1952. Parlor and sleeping car revenue ($147,421,183) fell 15.6 per cent.

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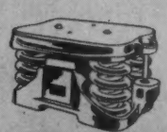


Ride-Control Packages

Simplex Snubbers

Tightlock Couplers

Type F Couplers

Type E Couplers

Loadings Seen on Even Keel

Shipper boards predict fourth quarter's business will be close to 1952 level

Freight carloadings in the fourth quarter of 1953 are expected to be practically on the same level as in the corresponding period of 1952, according to estimates of the 13 regional Shippers Advisory Boards.

On the basis of these estimates, loadings of the 32 principal commodity groups will be 7,770,191 cars in the fourth quarter of 1953, compared with 7,777,541 actual loadings for the same commodities in the like period last year.

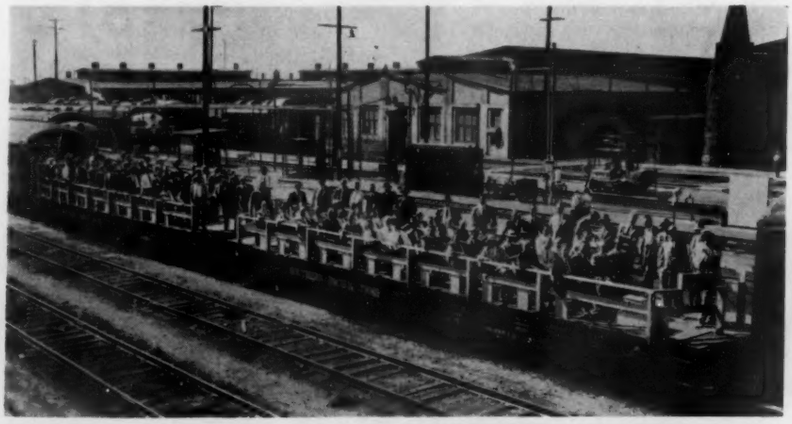
Five boards estimate an increase and eight a decrease in loadings for 1953's fourth quarter compared with the same period a year ago.

The accompanying tabulation shows actual loadings for each district in the fourth quarter of 1952, estimated loadings for the fourth quarter of 1953, and percentage of changes.

The shipper boards expect a loading increase in 12, and a decrease in 20, commodity groups. Estimated increases range from 18.6 per cent for vehicle parts to 0.7 per cent for sugar, syrup and molasses.

Decreases expected by the boards range from a 42.9 per cent drop for hay, straw and alfalfa, to 0.2 per cent for cotton seed, soybean-vegetable cake and meal (excluding oil).

Shippers Advisory Boards	Actual Loadings Fourth Quarter 1952	Estimated Loadings Fourth Quarter 1953	Percent Increase
Atlantic States	792,116	811,637	2.5
New England	120,606	118,213	2.0 dec.
Allegheny	897,283	921,570	2.7
Ohio Valley	915,033	930,232	1.7
Southeast	982,399	981,860	0.05 dec.
Great Lakes	589,216	612,972	4.0
Central Western	308,616	297,938	3.5 dec.
Midwest	919,760	869,829	5.4 dec.
Northwest	647,133	633,948	2.0 dec.
Trans-Missouri-Kansas	399,718	396,194	0.9 dec.
Southwest	547,787	542,200	1.0 dec.
Pacific Coast	391,476	397,479	1.5
Pacific Northwest	266,398	256,119	3.9 dec.
TOTAL	7,777,541	7,770,191	0.1 dec.



BROKERS—all members of the San Francisco Stock Exchange—got a first hand look at railroad terminal operations when the Southern Pacific arranged this tour of its facilities at Sacramento and Roseville. The group also inspected car repair and icing facilities of the Pacific Fruit Express Company at Roseville. When the tour was over, many brokers confessed they never before had seen a classification yard or car shop in action.

AIR MAIL TEST COSTING 4 TIMES RAIL SERVICE

When the Post Office Department last week gave the air lines the three-cent, first-class mail that had been moving by rail between New York and Chicago and Washington and Chicago, it began paying 18.6 cents and 20.04 cents per ton-mile for transportation service it could get from railroads for about five cents per ton-mile.

The latter is the average cost to the department of having mail moved in so-called storage cars; and more than 25 per cent of the first-class mail moves that way, taking the same rate as lower-class mail matter in the same cars. Railroad men with backgrounds in the lore of mail transportation and mail pay consider the storage-car service akin to the transportation service which the air lines will perform in the new operation. Thus they will defend the foregoing cost comparisons as valid.

Moreover, they point out that mail moving between major points has been selected for the experiment. And they call this "cream traffic."

As to the speed of air transport, they suggest that the air service might not be so swift if the air carriers were forced to take on the whole job of working the New York-Chicago and Washington-Chicago routes by dropping off and picking up mail at intermediate points. (*Railway Age*, September 28, page 34.)

TP&W Catalogs U.S. Rail Rate Committees

"As a service to shippers," the Toledo, Peoria & Western has published a 50-page loose-leaf directory of all railroad rate committees in the United States, plus other committees and organizations, both national and regional, having rate-making functions. Among these are the Interstate Commerce Commission, the Defense Transport Administration, the U.S. Senate and House Committees on Interstate and Foreign Commerce, the Railroads' Tariff Research Group, etc.

The directory is bound in an 8½-in. by 11-in. heavy paper cover and fastened with metal clips to permit removal of obsolete pages and insertion of revised data. All pages are dated. In listing rate committees, the road has shown the names and addresses of chairmen, vice-chairmen and assistants, and the name and railroad affiliation of each committee member.

A number of the "short" pages are

filled out with pictures of TP&W equipment, past and present, and the front of the book contains a map and illustrated list of TP&W agents and agencies. But the road has not otherwise used the book for advertising purposes.

Edmond H. Gaiennie, vice-president in charge of traffic, has indicated the road will issue revised pages and supplemental data as future events require.

D&RGW Wants to End Ogden Passenger Runs

The Denver & Rio Grande Western has petitioned the Utah Public Utilities Commission for permission to discontinue passenger service between Salt Lake City and Ogden. The road presently operates a round trip daily from Salt Lake City using coach and dome-coach equipment of the "Royal Gorge" — a Salt Lake-Pueblo, Colo.-Denver train.

In its petition, the company said the service was being operated at a loss: $83,800 in 1951, $70,000 in 1952, and $21,000 in the first four months of 1953. Increased automobile traffic and parallel rail and bus service between the two cities can provide adequate transportation without D&RGW service, the petition stated.

Competitive Transport

C.A.B. Extends Air Coach Service; Seeks Expansion

The Civil Aeronautics Board has approved "indefinite extension" of air coach service, and has advised air lines that continued development of air transportation "requires extension of coach service to new points and over new routes."

Earlier C.A.B. rulings had placed a December 31, 1953, expiration date on air coach service. The board recently reviewed such operations, however, and found they were contributing to growth of air traffic, were causing little net diversion, and were, in addition, profitable.

The board noted that increased coach traffic since 1951 has resulted from "more intensive development of existing service rather than extension of coach service to new points and air routes." It then stated that extension is now required.

Serious consideration should be given to applying present coach fares to proposed new service, the board said. It added that some "flexibility" may be necessary.

To help meet this latter requirement, the board placed no cents-per-mile ceilings on new coach service. It imposed only one specific requirement: Fare for a new coach service must not exceed 75 per cent of the corresponding first-class fare.

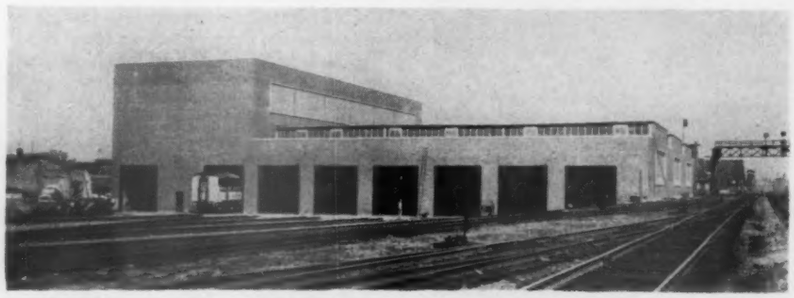
Existing restrictions on air coach service will continue. These include minimum seating density, no free food service and limitations as to hours of departure.

Hertz Promotes Rail Travel

The fall advertising campaign of the Hertz Rent-A-Car System will feature a special merchandising effort on a local level as a follow-up to ads in national consumer magazines.

On October 12, Life magazine will carry a Hertz ad designed to promote the advantages of rail travel and the convenience of renting a car at destination. Follow-up plans include display easels of the ads, which will be made available to railroads for use at ticket and sales offices. In addition, letters will remind more than 2,000 travel agents of commission opportunities for selling Hertz service in connection with rail tours.

The system has a similar program in effect in connection with airline travel.



$1 MILLION DIESEL SHOP opened by the Rock Island at Chicago October 1, will accommodate 16 locomotive units at one time. The building also houses offices for the assistant master mechanic and road foreman of equipment and their staffs, plus stores, department facilities and wash, lunch and locker rooms for mechanical employees. Interior walls in both shop and offices are in pastel tones. Fluorescent lighting is used everywhere except in repair areas where mercury vapor lamps are installed.

Operations

NYC Seeks to Drop Chicago Suburban Runs

Because it claims the service is losing more than $250,000 a year, the New York Central is asking the Illinois Commerce Commission and the Public Service Commission of Indiana for permission to discontinue all suburban trains between Chicago and Chesterton, Ind.

As an alternative, the NYC proposes to stop several through trains at the more important suburban stations during rush hour periods. This, the NYC says, would accommodate about half the 625 riders the local trains now carry on a typical day. Other passengers use the service largely for travel within the city of Chicago where alternate public transportation is available.

The present service is operated by five week-day and two week-end trains in each direction. Traffic has declined because of private auto and bus transportation, the NYC explained.

Losses—The petition ties the company's losses to the individual passenger. It shows that for each of the 625 average daily riders, the NYC has sustained an annual loss of $463. Annual revenues are reported as $129,000, compared to annual operating costs of $418,000.

Five-Day Week Stumbling Block for L.C.L.

Candidly admitting to a shipper-audience that railroad l.c.l. service was poor—and that it wasn't the shippers' fault—John L. Webb, system manager of stations and motor service for the Pennsylvania, listed the factors he felt were halting progress. Mr. Webb—who is also chairman of the committee which drew up plans for the newly established l.c.l. traffic research group authorized by the Association of American Railroads—spoke to the first annual meeting of the National Small Shipments Traffic Conference at Chicago October 1.

Principal cause of poor service, he said, was establishment of the five-day week at freight houses and terminals. He said this was "the No. 1 topic on the railroads' hit parade," and that by some means or other, railroads must get back to seven-day operation at key points before any real improvement can be shown.

He cited the Southern's experience with operating terminals on a seven-day basis and termed the resulting service to shippers "good."

Other factors affecting speed and quality of l.c.l. service are railroad operating problems, he continued. They include delays in setting cars at destination; "mechanical hazards" such as hot boxes and equipment failures;

weather, and wrecks. He emphasized that all these are vastly overshadowed by the affect of the short work week.

He suggested several things that shippers can do now to help the service run more smoothly. They include:

- Marking packages clearly and accurately (so they match the bill of lading for quick identification).
- Cutting down time cars are held at shippers and receivers platforms.
- Combining small packages going to the same consignee so hand sorting can be minimized.

Pacific Electric Retires From Passenger Business

September 30 marked the end of all passenger operations on the Pacific Electric, Southern Pacific subsidiary in the Los Angeles metropolitan area. The following day, Metropolitan Coach Lines, a subsidiary of Western Transit Systems, Inc., assumed operation of the PE's motor coach system and few remaining rail passenger lines. The new company also took over various PE garages, shops servicing and storage facilities adjunct to the interurban line's passenger services. The purchase price has been reported as about $8 million.

Freight operations on the approximately 700 miles of line the PE operates in four California counties continue as before. Many of the lines are electrically operated, although the PE's freight locomotive fleet is currently about 50 per cent dieselized. (A previous story on the sale of PE passenger operations appeared in the March 16 *Railway Age* and an illustrated account of its operations was published in the October 27, 1952, issue.)

FRED HARVEY SERVICE has been "mechanized" to provide meal service aboard a new streamliner the Santa Fe has placed in operation between El Paso, Tex., and Albuquerque, N.M. Named "El Pasoan," the new train consists of a head-end car, a 52-passenger coach and a 30-seat coach that features this "Lunch-O-Mat" dining section. The new train replaces an overnight coach and sleeping car service by offering daylight round-trip service on fast schedules.

The "Lunch-O-Mat" (see *Railway Age*, October 27, 1952) offers a menu of 11 items, including a choice of two hot sandwiches which are heated in from 10 to 14 seconds by radar; hot coffee made by the cup at the time of purchase; and a variety of cold sandwiches, fruit juices and pastries. Extra quantities of food are stored in refrigerated compartments in the base of the machine and all food compartments are refrigerated and sealed. A separate cash box discourages possible pilfering.

Figures of the Week

Net Income Is Up $137 Million

Eight-months' figure of $572 million compares with $435 million in like 1952 period; August net was up slightly

Class I railroads in the first eight months of this year had estimated net income, after interest and rentals, of $572,000,000, according to the Bureau of Railway Economics of the Association of American Railroads. This compared with net income of $435,000,000 in the first eight months of 1952.

Net railway operating income, before interest and rentals, was $744,916,284 for the first eight months of this year. The comparable 1952 figure was $613,069,838.

August Net—Estimated results for August showed net income of $82,000,000, compared with $81,000,000 in August 1952. Net railway operating income for the 1953 month amounted to $101,635,605, compared with $105,227,433.

In the 12 months ended August 31, the rate of return averaged 4.59 per cent, compared with 4.01 per cent for the 12 months ended August 31, 1952.

Gross in the first eight months of 1953 amounted to $7,177,891,292, compared with $6,810,999,610 in the same period of 1952, an increase of 5.4 per cent. Operating expenses amounted to $5,413,718,323, compared with $5,298,347,702, an increase of 2.2 per cent.

Seventeen Class I roads failed to earn interest and rentals in the first eight months of 1953, of which nine were in the Eastern district, two in the Southern region and six in the Western district.

CLASS I RAILROADS—UNITED STATES

	1953	1952
Month of August		
Total operating revenues	$ 924,753,910	$ 899,733,630
Total operating expenses	689,467,155	663,359,720
Operating ratio—percent	74.56	73.73
Taxes	112,211,991	113,492,148
Net railway operating income (Earnings before charges)	101,635,605	105,227,433
Net income, after charges (estimated)	82,000,000	81,000,000
Eight Months Ended August 31		
Total operating revenues	7,177,891,292	6,810,999,610
Total operating expenses	5,413,718,323	5,298,347,702
Operating ratio—percent	75.42	77.79
Taxes	862,075,835	780,695,887
Net railway operating income (Earnings before charges)	744,916,284	613,069,838
Net income, after charges (estimated)	572,000,000	435,000,000

Freight Car Loadings

Loadings of revenue freight in the week ended October 3 totaled 812,554 cars, the Association of American Railroads announced on October 8. This was a decrease of 7,155 cars, or 0.9 per cent, compared with the previous week; a decrease of 39,366 cars, or 4.6 per cent, compared with the corresponding week last year; and a decrease of 46,203 cars, or 5.4 per cent, compared with the equivalent 1951 week.

Loadings of revenue freight for the week ended September 26 totaled 819,709 cars; the summary for that week, compiled by the Car Service Division A. A. R., follows:

REVENUE FREIGHT CAR LOADINGS

For the week ended Saturday, September 26

District	1953	1952	1951
Eastern	137,427	140,967	143,814
Allegheny	159,023	168,855	175,595
Pocahontas	59,466	63,616	67,734
Southern	128,020	134,137	131,414
Northwestern	140,473	151,140	143,090
Central Western	130,702	135,434	137,391
Southwestern	64,598	67,916	65,537
Total Western Districts	335,773	354,490	346,018
Total All Roads	819,709	862,065	864,575
Commodities:			
Grain and grain products	52,832	50,778	51,330
Livestock	12,705	13,220	17,174
Coal	140,669	150,862	160,218
Coke	12,539	14,366	15,985
Forest products	45,891	44,107	45,593
Ore	85,964	98,002	82,200
Merchandise l.c.l.	70,682	76,305	76,949
Miscellaneous	398,427	414,425	415,126
September 26	819,709	862,065	864,575
September 19	823,884	873,596	863,490
September 12	710,554	881,291	850,812
September 5	799,079	746,882	732,769
August 29	818,461	727,360	829,481
Cumulative total 39 weeks	29,068,039	28,017,896	30,343,699

In Canada.—Carloadings for the seven-day period ended September 21 totaled 84,989 cars, compared with 83,805 cars for the previous seven-day

period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
September 21, 1953 ..	84,989	31,485
September 21, 1952 ..	84,393	36,208
Cumulative Totals		
September 21, 1953 ..	2,885,294	1,193,855
September 21, 1952 ..	2,968,134	1,254,655

I.C.C. Bureau Adds 1952 To Average Rate Indexes

The Interstate Commerce Commission's Bureau of Transport Economics and Statistics has added the figures for 1952 to its indexes of average freight rates. The indexes are designed to measure changes in revenue attributable solely to changes in rates.

The latest report, Statement No. 5339, was prepared by R. T. Smith. It is the third in a planned annual series, the first having been issued in October 1951 and the second early this year. *(Railway Age*, April 6, page 16.)

An accompanying table, reproduced from the present report, shows indexes by commodity groups for each of the six years from 1947 through 1952. Figures in the "approximate standard deviation" column indicate "normal" margin of error to be expected because the bureau's one per cent waybill sample was used.

INDEXES OF AVERAGE FREIGHT RATES FOR INTER- AND INTRASTATE RATES BY COMMODITY GROUP (1950 = 100)

Item	Index 1947	1948	1949	1950	1951	1952	Percent increase 1952 over 1947	Approx. Standard deviation
Interstate rates								
All commodities	79	93	99	100	102	109	38	.5
I. Products of Agriculture	80	93	98	100	102	107	34	.5
II. Animals and Products	77	93	99	100	102	110	43	.5
III. Products of Mines	82	91	98	100	102	108	32	.5
IV. Products of Forests	78	92	98	100	102	109	40	.5
V. Manufactures and Miscellaneous	78	94	101	100	102	110	41	.5
Intrastate rates								
All commodities	82	93	99	100	102	108	32	.5
I. Products of Agriculture	80	92	97	100	102	109	36	1.0
II. Animals and Products	83	96	98	100	103	109	31	1.5
III. Products of Mines	84	93	99	100	102	107	27	.5
IV. Products of Forests	84	95	98	100	102	110	31	1.0
V. Manufactures and Miscellaneous	80	95	100	100	102	108	35	.5

Safety

JCL Announces Contest Winners

Brakeman wins first prize of extra two weeks' paid vacation; over 500 employees entered competition

James J. Clark, a Jersey Central Lines' freight brakeman at Elizabethport, N.J., won the first prize of two extra weeks' vacation with pay in a JCL safety rules contest worth $1,000 in awards. Over 500 employees entered the 50-prize competition.

Second prize, one week's extra vacation with pay, was won by Reuben Dunfee, a locomotive fireman. A. S. Cline, the road's agent at Bridgeton, N.J., took third prize, a table model television set. Fourth and fifth prizes, $100 watches, went to Alan Levin, machinist apprentice at Elizabethport, and to John Mattey, locomotive fireman. Each of the other 45 prize winners, among whom were 10 members of railroaders' families (six wives and four children), received an engraved wallet.

The contest started this summer when the road issued a new safety rule book. Contestants were required to answer correctly 10 questions about the new rules and then complete, in not more than 25 words, the statement: "The Jersey Central safety rules are important to me because . . ." The contest was judged by a committee of editors of *Railway Age*, headed by Editor James G. Lyne. They chose Mr. Clark's entry as the "most dramatic and effective" of all. Mr. Clark, who has worked for the railroad 12 years, wrote: "The Jersey Central safety rules are important to me because if we don't work safe, we won't be here to work!"

Rates & Fares

Canadian Freight Rates Have Been Shuffled

A partial measure of freight-rate equalization providing for lower rates in western Canada and a slight increase in Ontario and Quebec has been ordered by the Board of Transport Commissioners. The rate changes, regarded as an interim move, and announced at an opening hearing in Ottawa on the subject of freight-rate equalization, will become effective November 15.

In terms of dollars, it has been estimated that the interim change will mean little to annual revenues of Canadian railroads. The west's freight bill will drop by about $2,000,000 a year and the bill to Ontario-Quebec shippers will rise by about the same amount.

B&M Would Adjust Commuter Fares

A petition for authority to readjust passenger fares to establish a uniform rate on commutation tickets for similar distances and to rationalize the fare structure to permit uniformity of rates on commuter tickets has been filed by the Boston & Maine with the Massachusetts Department of Public Utilities. If authority is granted, the road will seek to extend the readjustments to cover other states and interstate traffic.

Law and Regulation

I.C.C. Would Disbar Two Lawyers in NS Inquiry

Two attorneys representing the Norfolk Southern's former president, J. T. Kingsley, have been called upon by the Interstate Commerce Commission to show cause why they should not be disbarred from further practice before the commission.

The attorneys are John K. Pickens and Jerry N. Griffin, and the show-cause orders were served on them October 7 at the close of oral argument in the case involving the commission's investigation of NS practices. The orders were based on statements made by Messrs. Pickens and Griffin in their

. . . The Bangor & Aroostook is issuing credit cards permitting passengers to charge railroad and Pullman tickets at all B&A stations. The cards also are accepted on B&A dining cars for meals and incidental services. Although the cards can be honored only at B&A stations, patrons may charge through one-way or round-trip tickets from those stations to any point in the United States or Canada. The road has put in operation two modern type Pullman cars to replace older type cars which had operated between Boston and Van Buren, Me. No room on the cars requires more than one rail fare for single occupancy.

exceptions to Examiner O. L. Mohundro's proposed report in the case.

The cited statements, the show-cause orders said, "charge the commission with ulterior motives in the assignment of an examiner, with holding hearings in said proceeding for a purpose other than that represented in its order of investigation, and with holding hearings with an intent to debase respondent Kingsley for the purpose of publicity."

The Pickens case is docketed as Ex Parte 190 and the Griffin case is Ex Parte 191. The orders give the respondents 30 days to show cause why they should not be disbarred.

Organizations

Service Life of Train Radio

A.A.R. Communications Section to hear how long sets can be expected to operate between total failures

"How dependable is our train radio equipment?"

"How long may a set be expected to operate between total failures?"

Questions of this nature concerning performance of train radio equipment have been studied over a period of months by L. E. Verbarg, superintendent communications of the Missouri Pacific. He will present his findings to the 30th annual meeting of the Communications Section of the Association of American Railroads, to be held at the Plaza Hotel, San Antonio, Tex., October 20-22.

Other topics to be described during the convention include: Communications on Mexican railroads; training courses for communications employees; and new electronic devices used in ticket sales, telephone sets and communications circuits. There will be an exhibition of communications equipment and appliances in connection with the convention.

TUESDAY, OCTOBER 20

10 a.m.—Address by Donald V. Fraser, president, Missouri-Kansas-Texas.

Remarks by Section Chairman, C. O. Ellis, general superintendent communications, Rock Island.

"Use of Transistors in Dispatchers' Telephone Sub-sets," by J. H. Wallis, superintendent communications, Baltimore & Ohio.

2 p.m.—Outside Plant—committee report

"Railroad Communications on Mexican Railroads," by Bernardo E. Arias, superintendent, electric and telegraph department, of the National of Mexico.

Radio and Allied Communications—committee report.

"Intrafax Utilized by Pennsylvania Railroad in Ticket Sales and Service Bureau," by K. M. Lockerby, engineer telegraph and signals, PRR.

Research and Development—committee report.

WEDNESDAY, OCTOBER 21

10 a.m.—Communication Plant Operation—committee report.

"An Analysis of Train Radio Equipment Failures," by L. E. Verbarg.

Communication Transmission—committee report.

"Application of Compandors to Railroad Communications Circuits," by George L. Curtis, application engineering division, Lenkurt Electric Company.

"Discussion of Training Course for Communication Employees, as Instituted on the Union Pacific," by G. R. Van Eaton, superintendent telegraph, UP.

2 p.m.—Manufacturers' conferences and exhibits.

THURSDAY, OCTOBER 22

9:30 a.m.—Inside Plant—committee report.

Electrical Protection—committee report.

Inductive Coordination—committee report.

Maintenance-of-Way Club Organized in Minneapolis

At a meeting held at the Midway Civic Club, Minneapolis, September 24, a maintenance-of-way club was organized in the Twin Cities area. Activities and objectives of the new organization, named the Northwest Maintenance of Way Club, will be patterned after similar organizations in New York, Chicago and St. Louis. A total of 134 persons attended the organizational meeting, including 101 railroad men and 33 supply men.

Thomas R. Klingel, principal assistant engineer, Soo Line, acted as

GN BUILDS 15 ALL-STEEL CABOOSES

The Great Northern has recently completed 15 new 30-ft. steel cabooses with top cupolas, built in company shops at St. Cloud, Minn., for main-line freight-train service. The cupola-type design is standard on the GN because of advantages in mountainous territory where snowfall is heavy.

Special attention was paid to secure adequate strength in side framing and cupola framing, all of which was fabricated by welding and covered with welded exterior side sheets. Miner A-28-XB friction draft gears are installed and Universal hand brakes.

The trucks are 80,000-lb. capacity GN standard, having journal boxes cast integral with side frames and bolsters supported on swing hangers to assure easy riding.

Windows are aluminum sash with double-pane safety glass. Side windows in the cupola are of the sliding type. End doors have drop sash windows. Over each conductor's desk (one of which is located at each end, as in other GN cabooses) is a lift-sash window.

The caboose body is completely insulated with fiber glass wool. Steps and end platforms are constructed of open grating steel.

In addition to other electric lights, there is a spot light on each end to illuminate track behind the train. Each spot light is operated by a remote-control handle located at the conductor's desk at that end of the caboose.

Each caboose is equipped with a 1-kw. safety generator, situated inside the caboose body for convenience in servicing. The generator is axle driven. The caboose interior is finished with bonded plywood. All lockers, including the ice box, are of steel.

Train and switching personnel, as well as other railroaders and the public, receive safety reminders from slogans stenciled on the sides. This is an innovation on the GN, begun with these cabooses.

Slogans are being applied to some other cabooses this year also and will gradually appear on all cabooses on the railway to promote safety. Ten different safety slogans are used on caboose sides, the same slogan being applied to both sides of individual cabooses.

As part of the GN's previously announced plan of installing head-to-rear and train-to-trackside radio communication in main-line freight service, these cabooses will receive radio when equipment is available.

OFFICERS ELECTED at the organizational meeting of the new Northwest Maintenance of Way Club, held at Minneapolis September 24, are, left to right: George G. Prest, executive secretary (president, George G. Prest Company, St. Paul); J. M. Gustafson, Second vice-president (bridge engineer, Minneapolis & St. Louis, Minneapolis); H. R. Peterson, First vice-president (chief engineer, Northern Pacific, St. Paul); T. R. Klingel, president (principal assistant engineer, Soo Line, Minneapolis); and L. C. Blanchard, secretary-treasurer (road-master, Milwaukee, Minneapolis).

temporary chairman, and was named president of the club. Other officers are shown in the accompanying picture.

Members of the Executive Committee, elected for two-year terms, are: C J. Freseman, division engineer, Chicago, St. Paul, Minneapolis & Omaha; I. W. McPherson, general manager, Minneapolis, Northfield & Southern; and W. J. Cruse, engineer of track Great Northern. Members of that committee to serve for one year are: R. J. Moe, Woolery Machine Company; Stan H. Haigh, William Ziegler Company; and F. J. Voss, vice-president and chief engineer, Duluth, Missabe & Iron Range.

The first regular meeting of the club will be held October 22 at the Midway Civic Club. The principal speaker at that meeting will be W. B. Blix, manager, Railway Equipment division, Nordberg Manufacturing Company, whose subject will be "New Developments in Maintenance of Way Machines."

U.S. Chamber Committee Starts Transport Studies

The Transportation and Communication Committee of the Chamber of Commerce of the United States has appointed seven subcommittees to study new proposals and expiring chamber transport policies.

Under the chamber's by-laws, all policy declarations automatically expire after three years unless reaffirmed.

John E. Tilford, president of the Louisville & Nashville, is chairman of the "Government Relations" subcommittee. The other subcommittees and their chairmen are:

Transport Policy—D. G. Ward, director of transportation, Mathieson Chemical Corporation.

Merchant Marine — Warner B. Shepherd, general traffic manager, Aluminum Company of America.

Streets and Highways—Powell C. Groner, president, Kansas City Public Service Company.

Government Expenditures — Edwin P. Bergeron, president, Kankakee Auto Leasing Corporation.

Labor Problems — Alex. K. Scherer, president, Scherer Freight Lines, Inc.

Taxes—R. A. L. Bogan, executive vice-president, Greyhound Corporation.

The annual meeting of the **American Council of Railroad Women** will be held at the Broadmoor, Colorado Springs, Colo., October 26-28. The business sesion will be held on Monday, October 26. On October 27 there will be a panel discussion of passenger train service, with Ioan V. Beckham, assistant to assistant vice-president, passenger traffic, New York Central, as moderator. Wednesday morning there will be a discussion of freight solicitation, to be followed in the afternoon by an address by Mrs. Alma Kittredge Schneider, superintendent of the United States mint at Denver. Featured speaker at the banquet on Wednesday evening will be H. C. Murphy, president, Burlington Lines. The sessions will be followed by a post-convention trip to Aspen.

The **Mid-West Shippers Advisory Board** will hold its 104th regular meeting in the Pere Marquette Hotel, Peoria, Ill., October 21-22. Special equipment will be provided from Chicago to Peoria on Rock Island train No. 503 leaving at 7 p.m. October 20. This equipment will return to Chicago October 22 on train No. 504 leaving at 3 p.m. Merle Yontz, president of LeTourneau Westinghouse Company, Peoria, will be principal speaker at the luncheon session on October 22.

Annual installation-of-officers dinner of the **Stock Yards District Traffic Club** will be held October 15 in the Central Manufacturing Club, Chicago. W. H. Roehrig, supervisor of merchandise of the Santa Fe will be the guest speaker. W. J. Heerman, assistant general freight agent of the Wabash, will be installed as president, while Joseph Regis, traffic manager of the Victor Manufacturing & Gasket Co., will become vice-president. Robert McNally, freight representative of the Rock Island, is the new treasurer and Fred Reitze, freight representative of the Santa Fe, will become secretary. Elmer Aird, traffic manager of the U.S. Cold Storage Company, and retiring president of the club, has been elected to the board of directors.

A dinner meeting of the **New York Railroad Club** will be held in the Grand Ball Room, Hotel Commodore, New York, at 7 p.m., October 19. "Making Friends for the Oil Industry" will be the subject of an address by Admiral H. B. Miller, director, department of information, American Petroleum Institute. The Cities Service Band of America will present its N.B.C. broadcast from the meeting room at 9:30 p.m.

A "rail camera safari" to Nineveh, N.Y., sponsored by the Lackawanna, in cooperation with the **Railroad Enthusiasts, New York Society of Model Engineers** and the Delaware & Hudson, is scheduled for October 24. The train will leave the Hoboken, N.J., terminal at 8:15 a.m.

Equipment & Supplies

Diesel Expansion Goal Is Reviewed by O.D.M.

The defense expansion "goal" for diesel locomotives is among those currently under review by the Office of Defense Mobilization. This "goal" calls for construction of 15,500 new locomotive units between January 1, 1950, and July 1, 1954, and railroads have been allowed accelerated tax amortization as an incentive toward attainment of this objective.

O.D.M. Director Arthur S. Flemming announced recently that he planned to review most of the post-Korea expansion goals, with the idea of curtailing those in which expansion is either com-

(*Continued on page* 35)

This Car Keeps Wet Wood Pulp from Freezing

Adequate insulation of box cars by the North Western produces 193 cu. ft. more capacity per car than reefers provided

An insulated box car designed to protect wet wood pulp from freezing in transit during the winter months has been developed by the Chicago & North Western.

This advantageous development is the result of studies and tests conducted by the railroad during the past two years to reduce damage and to find an economical replacement for a number of its refrigerator cars which were being used in this specialized movement, but which were soon due for normal retirement.

The railroad also sought a type of replacement which would have a lower cost of maintenance.

While work on the project started in 1951, it was not until February 1953 that tests with a specially insulated box car proved satisfactory. One such test in February, in which the car was under wet pulp load for six days, showed no freezing of contents even when the outside temperatures dropped to zero.

12 Cars Remodeled

Twelve box cars, including the test car, have been remodeled at the Winona (Minn.) shops from 40-ft. steel underframe composite box cars, which have an interior capacity of 2,576 cu. ft., after application of the insulation. This is an increase of 193 cu. ft. over each refrigerator car replaced. The method of insulating the cars was designed by G. R. Andersen, assistant chief mechanical officer. The insulating procedure was as follows:

1. Inside walls, ends and ceiling were first given a protective and insulating coating of cement similar to car undercoatings.

2. The original car floor was covered with two layers of Sisalkraft paper on which was applied ⅞-in. wood flooring.

3. A wooden framework was erected on the sides, ends and roof to provide support and depth for the insulating material.

4. Kimsul blanket insulation was fitted into the framework spacings on the sides, ends and roof. A similar wooden framework with insulation is installed on "plug"-type sliding side doors.

5. The entire insulated area was covered with two layers of Sisalkraft paper over which is applied GPX plastic-faced plywood having high abrasion and moisture resistance.

INSULATION is applied over sprayed end and side walls in wood frames. These are then covered with plastic-faced plywood.

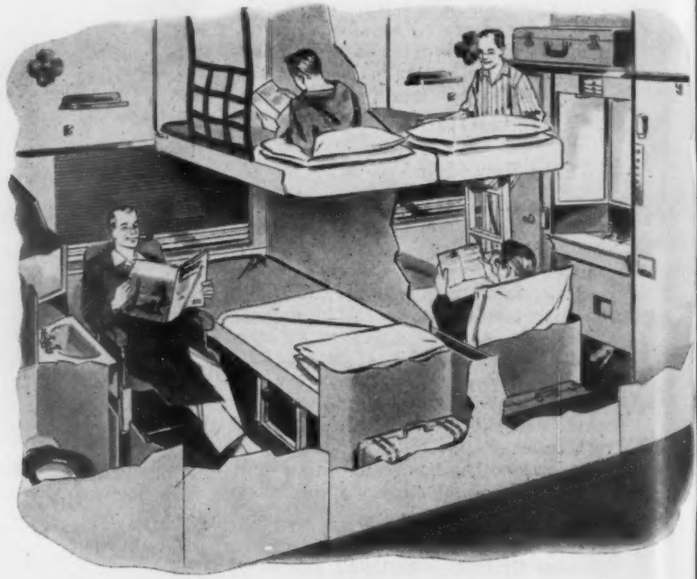
VERSATILITY KEYNOTES BEDROOM ARRANGEMENT

A partition, designed for rigidity and sound-deadening qualities, folds back to give more room for two to four people. Especially suitable for families, more floor space is available by elimination of the usual sofa.

Two folding lounge chairs in each bedroom enable passengers to ride in any position desired. Maximum privacy is assured by enclosed hopper facilities and separation of hopper from lavatory permitting individual use of each at the same time.

FUNCTIONAL DESIGN FOR MORE COMFORT

With the partition in place, two bedrooms are formed. Plenty of luggage space is available. The beds, enclosed in the passageway partition, fold down crosswise to form lower berths. Upper berth is lowered from ceiling. Washstand is made of vitreous china under the triple mirror. A vanity cover swings out over the washstand to make a dressing table.



The 85-foot-long 6-open section 4-bedroom 6-roomette "S" plan sleeper (opposite) weighs 152,000 pounds of which the trucks account for 42,000 pounds. Made of low-alloy high-tensile steel with the Pullman-Standard welded girder construction, they utilize stainless steel for parts especially subject to corrosion.

built for passenger preference

PASSENGERS, RAILROADS, AND CAR BUILDER COLLABORATE TO DESIGN A NEW SLEEPING CAR

Good passenger revenues from sleeping cars depend on the type of equipment and service you offer. This is why Pullman-Standard collaborated with the operators, the railroads and passengers themselves to find out what improvements could be made in sleeping car design. The result: the new "S" type Sleeper.

This car features three of the "S" type accommodations—six roomettes, four bedrooms, and six open sections. Studies indicated that passengers prefer the congeniality and budget cost of the open section. While roomettes still rate high, passengers wanted easier operation of the wall-type bed. Bedroom passengers requested more space and private, enclosed toilet facilities, in addition to a desire to have this more expensive type of accommodation placed in the center of the car. All these improvements and others commensurate with the requirements for safety, efficient car service, and economical maintenance are embodied in this new design.

Six different floor plans combine the right "S" type accommodations—open sections, duplex roomettes, roomettes, bedrooms, compartments and drawing rooms—to fit traffic demands of individual railroads. For further details about this new Sleeper or your other passenger car needs, ask your nearest Pullman-Standard representative to call.

YOUR NEEDS CREATE THE PULLMAN "STANDARD"

PULLMAN-STANDARD

CAR MANUFACTURING COMPANY

SUBSIDIARY OF PULLMAN INCORPORATED

79 EAST ADAMS STREET, CHICAGO 3, ILLINOIS

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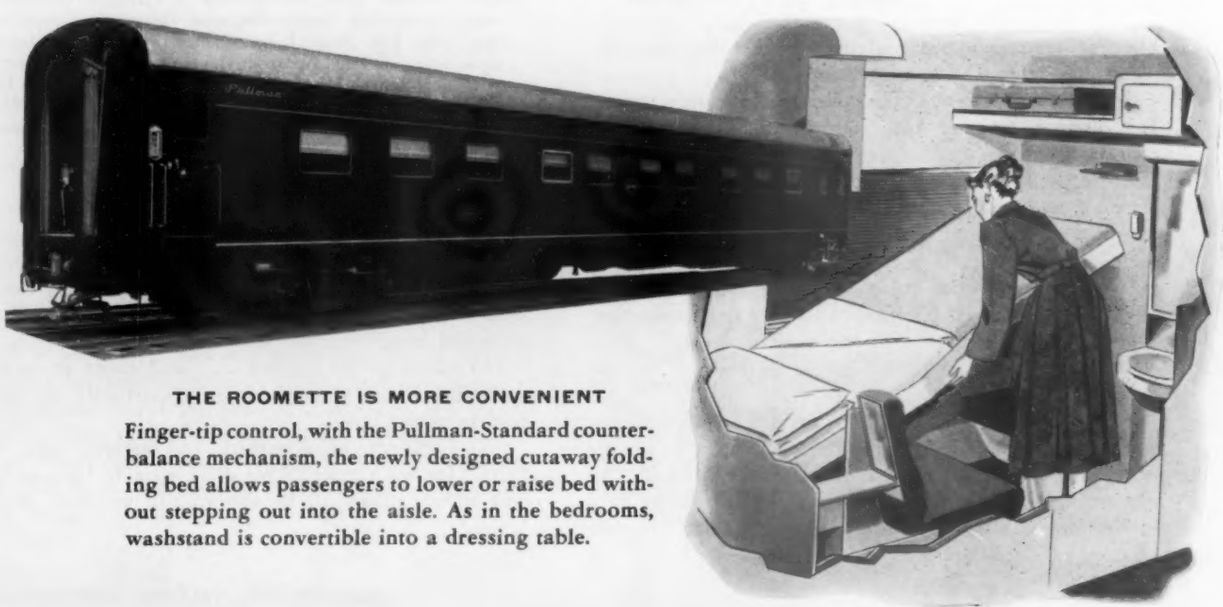


THE ROOMETTE IS MORE CONVENIENT

Finger-tip control, with the Pullman-Standard counterbalance mechanism, the newly designed cutaway folding bed allows passengers to lower or raise bed without stepping out into the aisle. As in the bedrooms, washstand is convertible into a dressing table.

THE LADIES—72 per cent of 'em—prefer to ride trains, according to the author's survey. They like leisure, security and room to stretch. They are critical of ticket-buying, stations, meal costs and "gadgets."

A Woman's Solution

. . . TO RAILROAD PASSENGER PROBLEMS

By BETTY BARTON
Director of Public Relations
Business Research Corporation
Chicago

There's a big untapped passenger market for the railroads to go after. That market is *women.*

Seventy-two per cent of the ladies prefer to ride trains. This finding, together with women's likes and dislikes about railroad passenger service, are revealed in a "consumer attitude" survey I conducted recently. In an informal type, "depth research" survey, conducted over an extended period, approximately 3,500 women were questioned regarding their preferred method of traveling—not only for themselves but also for their "businessman" husbands and their families. Analysis and evaluation showed that 72 per cent of the women declared their choice to be railroad travel, giving as reasons for the decision:

(1) A leisurely trip by train provides an opportunity for rest and relaxation—a respite too difficult to obtain in today's busy, high-speed, industrialized world. As one medical specialist told a patient: "Your heart puts in one second's rest for every second's work. If you were as smart as your heart, you'd be a well person."

(2) Train travel supplies a sense of security . . . a psychological necessity from the feminine viewpoint.

(3) They want to "see something more than clouds" from windows, while relaxing in comfortable chairs, protected from wind and weather.

(4) Children are happier . . . and easier to care for on trains where there is more opportunity to stretch restless young legs.

(5) Certainty of departure and arrival dates is a "plus" for train travel. "We don't want to have to readjust all our plans just because of bad weather," say the ladies.

THE AUTHOR

Betty Barton is a member of a Chicago management consulting firm—Business Research Corporation. She has been keeping her eyes on railroad passenger service for many years. She dubs herself a "fem-engineer." Years of experience in measuring consumer attitudes have turned up interesting findings, some of them set forth here.

The critical statements made by feminine travelers may suggest to the open-minded railroad executive not only problems, but solutions neither too expensive nor difficult to achieve. A study of the wished-for improvements might well provide workable means for meeting some of the situations so frequently headlined by the press as: "Western Railroads Concerned at Drop in Passenger Traffic," "The Public Will Be Served," "Pennsy Picks V. P. to Cut Losses on Passengers," etc.

These are some of the things the ladies said in the informal survey:

• **They want ticket-buying made easier.** "Do the railroads use all of the suburban stations cooperatively for making reservations? Would they give us either the tickets or a credit card to show at the main station—or, better yet, on the train? There's no room to park in town. We can't stand in long lines on week days between 9 and 5, in order to pick up reservations, especially when we have children with us. If this is now being done, why don't they tell us?"

• **They are critical of old-fashioned, run-down stations.** "Why don't the cities and towns own railroad stations, like they do the airports? Then they could be painted, cleaned and modernized with public funds. The citizens could be proud of them. We would help in a fund-raising drive to do that, as a project, in our towns."

• **They want the extra comforts and courtesies which modern living standards demand.** "If, for example, a railroad supplied a baby-sitter to watch the little ones while we eat, we would certainly give it our business and recommend it to our friends."

• **These travelers want less expensive meals.** "Some railroads have coffee-shop cars or serve tray meals. The food is good and the price reasonable, even for the whole family. Why don't all big passenger-carrying trains have such a service?"

• **They need more information about train travel.** They want to know how to use the many types of "gadgets" found in sleeping cars, how much time must be allowed to get into the diner and be served, etc.

"On European trains, tickets are sold for the first, second or third service. One knows the price of the meal and when a seat is reserved," was a comment.

"There are so many mechanical gadgets! For example, how can you push a pedal controlling the water while standing on the other foot?"

"Couldn't they use a loud speaker to tell us about the diner and about the points of interest along the way?"

"Isn't there ever a smoking room for women on coach trains?"

The female of the species is well known for her demand for detailed perfection. Her opinion of railroad operation can have far-reaching effects. She may be "Mrs. Industry." Shippers have wives. She may be Madame President of the Woman's Club—a power in the community. Often, she is the public relations expert of the home and her husband's valued consultant.

Her perfectionism and her questions may be bothersome, but her experience in budgeting and housekeeping can be helpful in any business. Mrs. America gets things done and done well. Also, she is without equal in the art of subtle advertising by the valuable "word of mouth" method. *Her interest and support can turn the tide of public opinion against taxes, unfair subsidies and inequities.* She can promote the sale of good railroad passenger and freight service. The lady . . . and her influence—should be sought, not scorned.

WHAT A LADY IN THE BUSINESS THINKS ABOUT THIS ARTICLE

One of the few members of the gentler sex who is a full-fledged railroad passenger representative is Miss Alfreda Topping, of the Gulf, Mobile & Ohio's important New York office. Asked to read and comment on this article, she replied:

"I read with keen interest Miss Barton's findings resulting from her survey, and agree with her that the untapped potential of the woman's realm is a real challenge."

She took pains to point out that her railroad has "always recognized the importance of appealing to the woman's angle"; that it was the first road to place hostesses on streamliners; and that, ever since 1935, it "has trained young ladies aboard to make traveling easier for women passengers."

TO SUM UP:

Women like to travel by train. The lure of the locomotive, steam or diesel, still has pulling power for these potential passengers. The question remains: do the railroads want the business which these women control . . . and are they willing to go after it? If so, here are some suggestions:

First—Amplify the sales approach to this market by making use of the personalized public relations aptitudes of the many women who now work in various capacities for the railroads. There are organized groups of railroad women which would undoubtedly work on the project of forming a voluntary public relations task force. Since the more you know about a subject, the more you are interested in it—wouldn't it be a good idea to give the railroad gals the story and show them how to tell it? They could do a worthwhile job wherever they go. Add to this volunteer sales force, the wives, mothers, daughters and friends of railroad men and you have a power to be reckoned with.

Second—Plan the strategy of this passenger-getting campaign along new lines, providing sales pieces and advertising keyed to the woman's viewpoint. For example: a booklet on "How Mrs. Railroad Keeps House"; a "Quiz Game for Junior Engineers"; "push out" pictures of name trains to be given to traveling youngsters; "Ladies' Day" on the Railroad Hour, as well as on sponsored TV shows.

Third—Work out the entire program with the invaluable counsel of railroad advertising managers, railroad publication editors, and railroad public relations executives, using every available channel to activate the effort to persuade the lady that she and her family are important people, whose patronage is highly valued by the American railroads.

There is at least one positive approach to solving the problem of this to-be-or-not-to-be passenger question. The door to profitable business for both vacation and year-round travel is open . . . through the courtesy of "Mrs. U. S. America."

BOX CARS
FOR SALE
CAR BUILDERS

The ability to adapt to new situations *quickly* has always been a most profitable business asset.

a.c.f. engineers have built this kind of adaptability into every 50′ 6″ box car. Although standardized-design provides an 8-foot door, it can be modified to permit a 15′ door. This one change makes it available for *special duty* such as the shipment of cars, heavy machinery, tractors and other equally profitable freight.

Railroad traffic men prize this versatility for it solves many of the day-to-day problems that come from quickly changing customers' demands.

This is another example of the sound thinking behind every a.c.f. freight car. Add Standardized Design (for quality that often exceeds maximum AAR requirements) and Assembly Line Production (that cuts your purchase costs) and you can see why so many leading railroads use a.c.f. Box Cars on their toughest runs.

Giving better value is an a.c.f. tradition. The increased sales potential of the 50′ 6″ is in that tradition. If you want the full details of how it's paying off for others, call in your nearby a.c.f. Representative. American Car and Foundry Company, New York • Chicago • St. Louis San Francisco • Philadelphia • Washington • Cleveland.

BETTER TO BUY THAN TO BUILD

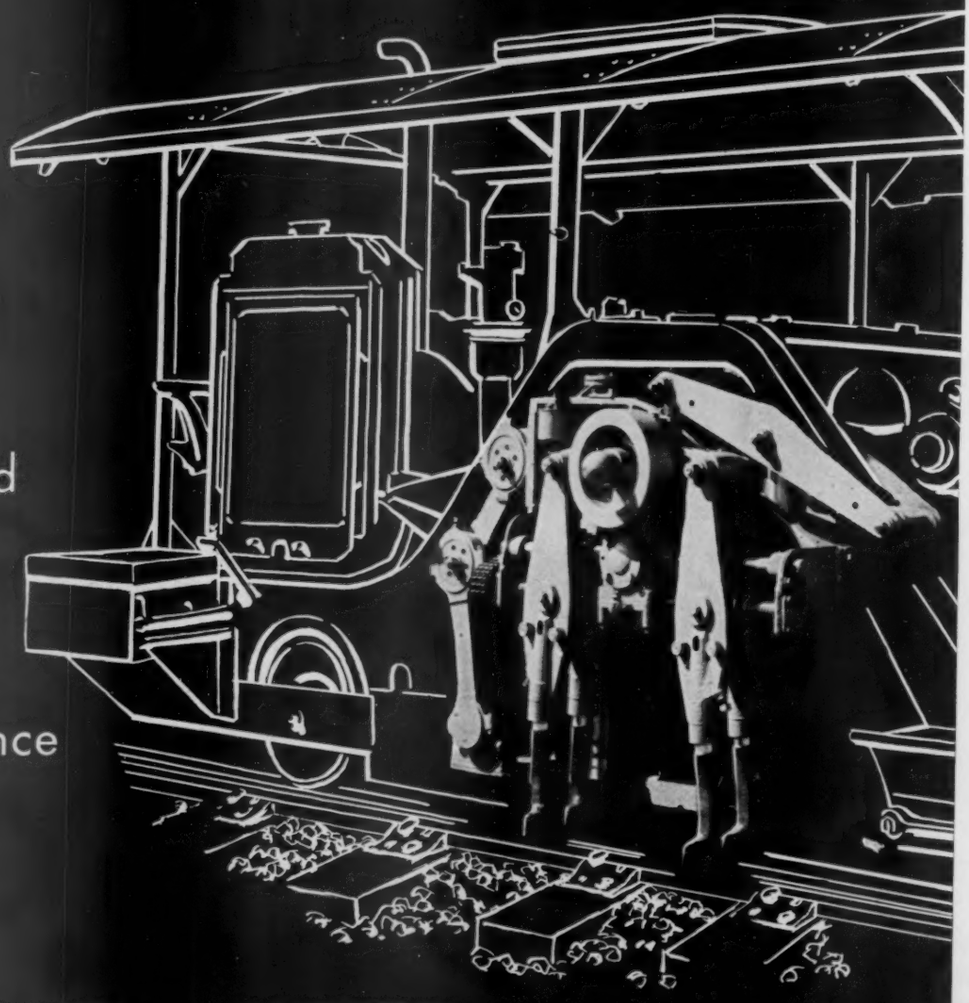
Your shops AVOID OVER-EXPANSION – no need to duplicate the cost of a.c.f.'s up-to-the minute facilities in shops, tooling and personnel.

You get MORE VALUE.

And you get STANDARDIZATION – which means better-built cars with fully interchangeable sub-assemblies and standard parts.

RS AMERICA'S RAILROADS a.c.f.

Matisa TAMPING



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IT DOESN'T ➧ POUND — IT *COMPRESSES*
IT DOESN'T ➧ PULVERIZE — IT *VIBRATES*
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Matisa precision tamping adds up to:
Leadership in the field in 1952!

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Matisa

"Big Railroader" or "Little Railroader"?

There was a time when the name "Studebaker" was not identified with an automobile, but with a popular farm wagon. Most of the urban gas companies—which are doing very well today as purveyors of domestic heating and industrial fuel—were originally organized to provide street and home lighting. Industries can keep on growing as the country grows—provided they adapt their methods, products and pricing policies to changes in demand.

On the railroads there are many sincere and able people who appear to believe they are doing their full duty if they carry on the job within their jurisdiction in much the same way it has always been done—only more efficiently. Such railroaders will succeed in making railroad service just a little better each year than it was the year before—a little better, that is, but probably not much different. If the enviroment in which the railroads live would only just stand still, and if people's demands would not change, then "the-same-thing-but-just-a-little-better" formula would be ideal for successful railroading. Unfortunately, though, the business environment does change; and the things people want from the railroads also change (largely because other forms of transportation are providing newer and differently priced services all the time).

Wouldn't it be a healthy mental exercise for every thoughtful railroader to ask himself a searching question: Am I a "little railroader" or a "big railroader"? That is, am I content to see the railroad I work for, and the railroad industry, doing just the kind of job (more efficiently, of course) this year that it did last year or ten years ago; or, on the contrary, does my main interest lie in doing my part to keep my railroad and the industry just as big a factor (or bigger) in transportation this year as last year or ten years ago?

A really honest answer to such a question does not come easily—especially where a railroad serves an area which is growing rapidly in total production and traffic. In such an area, it is possible for a railroad to be experiencing what appears to be healthy growth while, at the same time, it may be suffering a decline in its *proportion of total available traffic*. Is not the real measure of a railroad's success—not the absolute tonnage it secures, but the ratio it obtains of the *potential* tonnage that is economically suited to rail movement?

The task of successful adaptation to a changing business environment does not consist, entirely, in hanging on to business that is worth hanging on to, but also in getting rid of such business as can be better handled by some other agency of transportation. Tearing up decadent branch lines and cancelling red-ink services are not signs of railroad retreat, but of railroad progress. But that is only one side of the picture. The companies which shrink their losing services without expanding where the opportunity for profitable expansion exists are likely to find their total volume declining; and shrinking volume or even static volume is a bad omen for a mass-production business.

Many of the railroads which have been most successful in getting rid of red-ink branches and trains have made a specialized assignment of this activity—i.e., a small department has been set up which has become expert in detecting unprofitable operations, and in marshalling the evidence effectively for presentation to the public and the regulatory authorities.

How many railroads have a similar specialized department to search out opportunities for traffic expansion; and which is similarly expert and responsible for getting regulatory approval, where required? It could be truthfully said that the future of the railroads—whether they are to continue to be one of the country's biggest industries or are to shrink to a relatively modest position—depends on the zeal with which they fight for the right to compete for traffic for which they have an "inherent advantage." On many (but not all) occasions when they have sought this right from the regulatory authorities, permission has been denied them. Have these denials had their origin in (1) defects in the statutes, (2) perversity on the part of the regulators, or (3) insufficient skill and thoroughness in the preparation of the cases? Whatever the causes, all are subject to correction.

It just does not make sense that in North America, the vaunted bulwark of business freedom, the railroads' patrons should still favor subjecting them to the chains of a regulatory system designed to curb a vanished monopoly. Business and traffic leaders in Britain have had the discernment to concede complete freedom to compete to that country's railways (see page 63 in our August 24 issue). Business and traffic leadership in America would stultify itself before public opinion in denying equal rights to the American railways, if these railways would adequately spell out the challenge.

Questions and Answers FOR THE TRANSPORTATION DEPARTMENT

Is this a violation of car service rules? A Great Northern box car was loaded by an industry located on Nickel Plate rails at Cleveland; destination Portland Ore.; routed Nickel Plate, Burlington, Northern Pacific, Spokane, Portland & Seattle.

Yes. It's a violation in principle.

On this page in the September 14 issue, the opinion was expressed that this loading was technically a violation of Car Service Rule 3(A)(5). Several readers have written me asking if the usage cited would not be permissible under Rule 3(A)(2), which includes the clause: "Loaded in the direction of the home road."

The purpose of the question and answer was to call attention to the fine point of Rule 3(A)(5), with respect to a "home district and a district contiguous thereto."

In picking an example to illustrate this point, a destination was selected, inadvertently, which was nearer the owning road's rails than was Cleveland. Applying the usual "measuring stick"—i.e., that there is no violation if the car is nearer the home road at destination than it was at origin—the handling would be permissible. But had San Francisco, rather than Portland, been the destination, then there would have been violations of both Paragraphs 2 and 5, for San Francisco is more distant from any junction with the GN than is Cleveland.

It is my opinion that Rule 3(A)(2) was set up to "legalize" loadings from points such as Cleveland (in this case) to destinations intermediate to a junction with the owner, e.g., Milwaukee, Racine, Madison, etc. It stretches equity of the rules to approve a loading to the extreme western junction of the owning road, and in this instance to a competitive point. Admittedly, it is difficult to find a sound "middle ground" interpretation of Rule 3(A)(2) which would be better, everything considered, than the *distance* measuring stick ordinarily used.—*G. C. R.*

Can the movie camera be used effectively by railroads as a work simplification tool, i.e., would movies of men doing their jobs indicate where lost motion causes more than the necessary amount of work to be done?

Yes. Several roads are doing this.

We have quite a set-up for making our own motion pictures of men working. Once pictures have been developed we show them to the "actors." (Each operating division on the Seaboard has its own projector.) Men at work, seeing us taking movies, naturally endeavor to do their jobs the best way they know how.

They really think about what they're doing. And when we show the men the pictures, patting them on the back for their good actions and pointing out the mistakes, they think more about their work. Consequently, their working efficiency and safety-mindedness increases. (It should go without saying that such pictures are not used as the basis for disciplinary action. Such use would destroy the effectiveness of this medium of instruction.) Films showing the right and wrong ways to do jobs are especially useful in training new employees—*C. I. Morton, superintendent, Seaboard Air Line, Raleigh, N.C.*

(2) Movie cameras are very helpful in analyzing the way employees do their work, thus enabling the work procedure to be simplified. . . . I do not think there is anything particularly new in this technique being applied to railroading. Movies have been used in connection with switching cars and reducing rough handling, as well as shop work. Movie cameras also have been used for observing action of locomotive driving wheels and trucks in motion. Movies might be used to improve the work of crews switching cars; freighthouse labor picking up, moving and stowing freight; and employees on repair tracks and in shops.—*J. L. Barngrove, Jr., assistant to president, Lackawanna.*

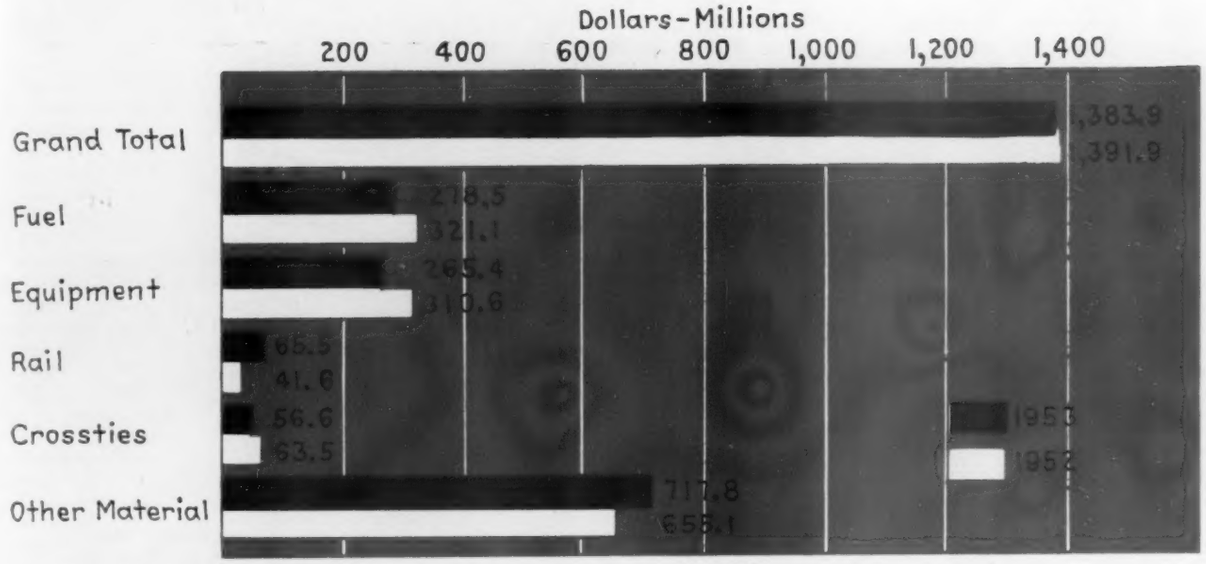
(3) Some use already has been made of the movie camera in widening the program for prevention of accidents and establishing safe working procedures. It probably could be used even more widely for the same purpose in switching and terminal operations, and at freighthouses and mail transfer points.—*G. W. Maxwell, superintendent, New York Central, Buffalo, N.Y.*

(The reader who suggested this question was prompted to do so by watching two veteran "pin pullers" in the lead switching crews at the same yard. One man did his work easily and with a minimum of lost motion, and his crew's production was much better than that of the crew whose pin man made hard work of the job. It was his thought that movies of the "artist" and the "dub" at work might have been helpful to the "dub" in question as well as to other switchmen. Movies have been exceptionally valuable in manufacturing industries for many years as an aid in work simplification.—G. C. R.)

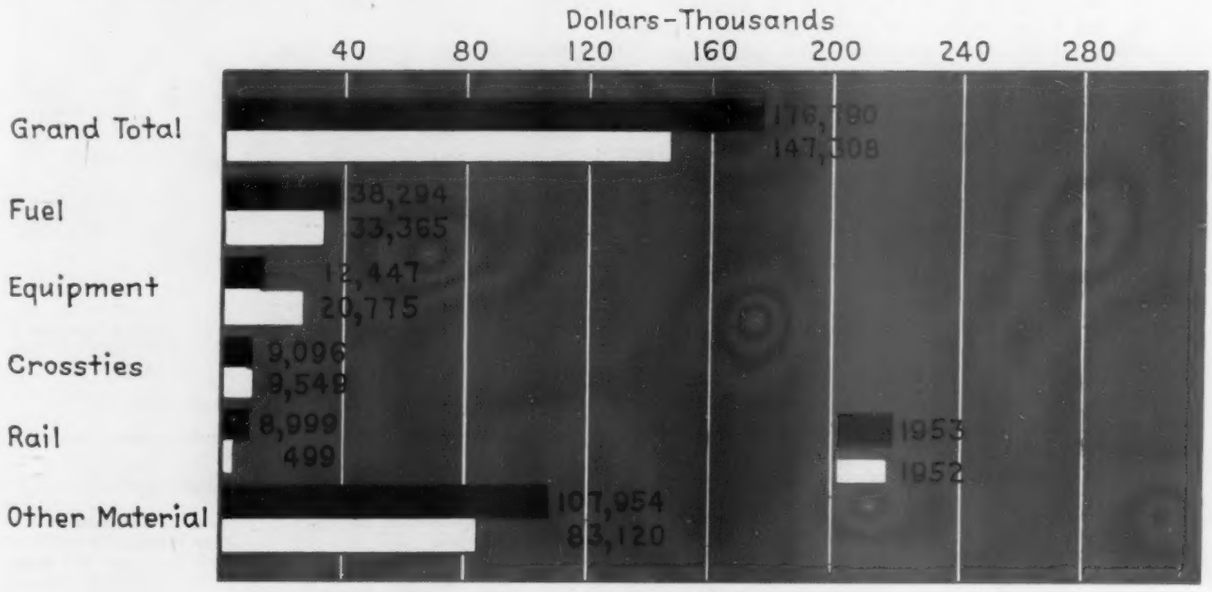
***WATCH FOR THIS QUESTION** in a future column: On some roads, because of increased labor costs, yard checks have been discontinued as a standard practice, thus putting the detection of delayed cuts of empties not needed locally on an irregular basis. How does your railroad prevent such delays?*

CONDUCTED BY G. C. RANDALL, district manager, Car Service Division (ret.), Association of American Railroads, this column runs in alternate weekly news issues of this paper, and is devoted to authoritative answers to questions on transportation department matters. Questions on subjects concerning other departments will not be considered, unless they have a direct bearing on transportation functions. Readers are invited to submit questions, and, when so inclined, letters agreeing or disagreeing with our answers. Communications should be addressed to Question and Answer Editor, *Railway Age*, 30 Church Street, New York 7.

FOR THE FIRST SEVEN MONTHS . . .



. . . AND IN JULY . . .



Railroad Purchases Continue High

HERE ARE THE DETAILED FIGURES:

JULY* PURCHASES OF MANUFACTURED GOODS (Excl. Equip. & Fuel)

Year	July '53 Compared to Other Julys (000) Amt.	% Change
1947	$105,869	+19
1948	110,457	+14
1949	91,906	+37
1950	91,782	+37
1951	135,064	— 7
1952	89,833	+40
1953	126,049	

Month	July '53 Compared to Other Months '53 (000) Amt.	% Change
Jan.	$111,071	+13
Feb.	107,658	+17
Mar.	123,233	+ 2
Apr.	121,685	+ 4
May	124,418	+ 1
June	125,813	—
July	126,049	

Year	Seven Months Totals '53 And Other Years (000) Amt.	% Change
1947	$711,263	+18
1948	760,456	+10
1949	730,767	+15
1950	605,278	+39
1951	947,588	—11
1952	760,255	+10
1953	839,927	

*Subject to revision.

(Continued on next page)

JULY* PURCHASES OF RAIL

Year	July '53 Compared to Other Julys (000) Amt.	% Change
1947	$8,024	+12
1948	7,143	+26
1949	11,021	—18
1950	9,884	— 9
1951	8,831	+ 2
1952	712	+1164
1953	8,999	

Month	July '53 Compared to Other Months '53 (000) Amt.	% Change
Jan.	$10,102	—13
Feb.	7,934	+13
Mar.	10,677	—16
Apr.	9,186	— 2
May	8,493	+ 6
June	10,073	—11
July	8,999	

Year	Seven Months Totals '53 And Other Years (000) Amt.	% Change
1947	$49,683	+32
1948	52,186	+25
1949	68,259	— 4
1950	58,506	+12
1951	60,085	+ 9
1952	41,635	+57
1953	65,464	

JULY* PURCHASES OF CROSSTIES

Year	July '53 Compared to Other Julys (000) Amt.	% Change
1947	$8,535	+ 7
1948	7,621	+19
1949	7,239	+27
1950	4,233	+115
1951	8,436	+ 8
1952	9,331	— 3
1953	9,096	

Month	July '53 Compared to Other Months '53 (000) Amt.	% Change
Jan.	$7,281	+25
Feb.	6,506	+40
Mar.	8,006	+14
Apr.	8,276	+10
May	8,526	+ 7
June	8,938	+ 2
July	9,096	

Year	Seven Months Totals '53 And Other Years (000) Amt.	% Change
1947	$57,092	— 1
1948	42,869	+32
1949	53,013	+ 7
1950	31,891	+78
1951	50,089	+13
1952	63,545	—11
1953	56,629	

JULY* PURCHASES OF OTHER MATERIAL

Year	July '53 Compared to Other Julys (000) Amt.	% Change
1947	$89,310	+21
1948	95,693	+13
1949	73,646	+47
1950	77,665	+39
1951	117,797	— 8
1952	79,790	+36
1953	107,954	

Month	July '53 Compared to Other Months '53 (000) Amt.	% Change
Jan.	$93,688	+15
Feb.	93,218	+16
Mar.	104,550	+ 3
Apr.	104,223	+ 4
May	107,399	+ 1
June	106,802	+ 1
July	107,954	

Year	Seven Months Totals '53 And Other Years (000) Amt.	% Change
1947	$604,488	+19
1948	665,401	+ 8
1949	609,495	+18
1950	514,881	+39
1951	837,414	—14
1952	655,075	+10
1953	717,834	

JULY* TOTAL PURCHASES (Excl. Equip.)

Year	July '53 Compared to Other Julys (000) Amt.	% Change
1947	$155,273	+ 6
1948	178,468	— 8
1949	129,010	+27
1950	134,753	+22
1951	179,045	— 8
1952	124,922	+32
1953	164,343	

Month	July '53 Compared to Other Months '53 (000) Amt.	% Change
Jan.	$156,091	+ 5
Feb.	147,718	+11
Mar.	163,816	—
Apr.	160,547	+ 2
May	161,238	+ 2
June	164,700	—
July	164,343	

Year	Seven Months Totals '53 And Other Years (000) Amt.	% Change
1947	$1,090,523	+ 3
1948	1,246,605	—10
1949	1,097,296	+ 2
1950	937,143	+19
1951	1,320,309	—15
1952	1,081,323	+ 3
1953	1,118,453	

JULY* INVENTORIES OF RAIL

Year	July '53 Compared to Other Julys (000) Amt.	% Change
July 1, 1947	$26,536	+57
1948	30,837	+35
1949	36,486	+14
1950	37,542	+11
1951	37,821	+10
1952	40,132	+ 4
1953	41,608	

Month	July '53 Compared to Other Months '53 (000) Amt	% Change
Jan. 1	$35,476	+17
Feb.	39,325	+ 6
Mar.	42,395	— 2
Apr.	43,102	— 3
May	43,752	— 5
June	43,514	— 4
July	41,608	

JULY* INVENTORIES OF CROSSTIES

Year	July '53 Compared to Other Julys (000) Amt.	% Change
July 1, 1947	$88,686	+20
1948	82,143	+29
1949	96,167	+10
1950	90,779	+17
1951	90,524	+17
1952	111,228	— 5
1953	106,017	

Month	July '53 Compared to Other Months '53 (000) Amt	% Change
Jan. 1	$110,135	— 4
Feb.	113,813	— 7
Mar.	116,024	— 9
Apr.	115,998	— 9
May	118,183	—10
June	109,837	— 3
July	106,017	

JULY* INVENTORIES OF OTHER MATERIAL

Year	July '53 Compared to Other Julys (000) Amt.	% Change
July 1, 1947	$553,228	+12
1948	610,025	+ 2
1949	623,281	—
1950	520,334	+20
1951	669,550	— 7
1952	675,832	— 8
1953	621,924	

Month	July '53 Compared to Other Months '53 (000) Amt	% Change
Jan. 1	$624,671	—
Feb.	622,333	—
Mar.	625,576	— 1
Apr.	629,952	— 1
May	620,952	—
June	622,000	—
July	621,924	

JULY* TOTAL INVENTORIES†

Year	July '53 Compared to Other Julys (000) Amt.	% Change
July 1, 1947	$734,254	+13
1948	821,161	+ 1
1949	854,036	— 2
1950	710,812	+17
1951	880,060	— 5
1952	904,853	— 8
1953	833,256	

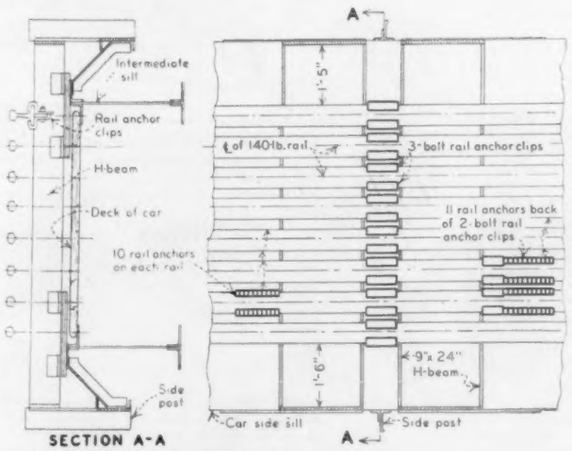
Month	July '53 Compared to Other Months '53 (000) Amt	% Change
Jan. 1	$839,830	— 1
Feb.	844,459	— 1
Mar.	850,267	— 2
Apr.	853,467	— 2
May	845,452	— 1
June	836,822	—
July	833,256	

*Subject to revision.
†All total inventory figures taken from I.C.C. statement M-125 for the month indicated.

AROUND REVERSE and sharp curves and over mountain grades, eight rails in half-mile lengths get . . .

Longest Welded-Rail Haul

NP demonstrates safety and economy of transporting welded strings long distances in preference to moving welding assembly



METHOD OF ANCHORING the long rails on one car near the middle of the train.

When the Northern Pacific decided to relay existing 131-lb. rail in its Stampede tunnel, which is about two miles long, with 140-lb. continuous welded rail, the question arose as to where to weld the rail. For the past three years the railroad had been welding rail at an assembly line established at Big Timber, Mont., which is 889 rail miles from the tunnel at Stampede, Wash.

To move the welding plant from Big Timber, the railroad would not only have the cost of dismantling, moving and re-erecting it, but also would lose the benefit of its experienced and efficient welding crew. A study of the situation was made which revealed that the cost of welding two track-miles of rail at its existing plant at Big Timber, then hauling it by special train to Stampede, would be far less than the cost of moving the plant, plus the anticipated increased welding costs while breaking in an inexperienced welding crew.

As a result of this study, it was decided to weld the rails at the existing plant at Big Timber. The rails were welded into eight strings—six of 2,490 ft. and two of 2,413 ft.—and were loaded onto 55 drop-end Hart cars equipped with rollers to support the rails. It was necessary to add a flat car, with rollers at its rear end, to the train to accommodate the 2,490-ft. strings.

Safety Precautions—The matter of moving the eight half-mile strings of rail by train called for several precautionary measures.

Since the rail train had to cross three mountain ranges, go up and down grades of as much as 2.2 per cent, and around sharp curves, many of which were of 10 deg. and one of 11 deg., substantial anchorage was constructed on one car at about the middle of the train to prevent endwise movement. Details of this anchorage are given in the accompanying drawing.

To safeguard the locomotive and the caboose in the event the rails should move endwise, an idler flat car and a car of gravel were coupled to the rail cars at each end of the train.

No provisions were made for preventing lateral movement of the rails while going around curves, and it turned out that the shoulders on the rollers were entirely adequate to stop this movement.

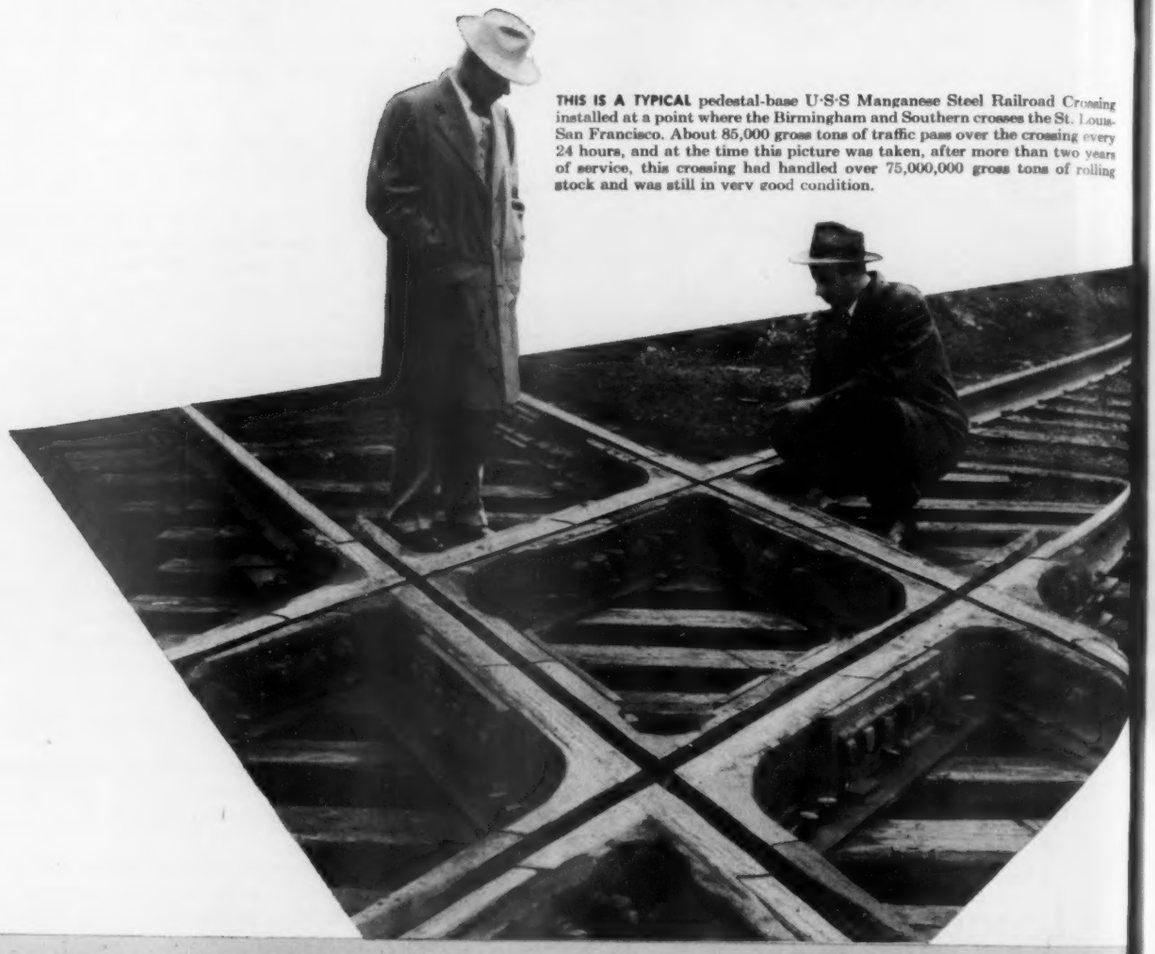
Train Carefully Handled—This special rail train moved only during daylight hours, and its speed was restricted to 25 m.p.h., except down mountain grades where it was held to 20 m.p.h. Also, where speed-reduction signs required lower speeds than those mentioned, the speed of this train was further restricted to 10 m.p.h. less than the posted signs.

Another precaution was to have the road foreman of engines of each division ride on the locomotive while the train moved over his territory. Also, a careful inspection of the equipment was made at each subdivision point to be sure it was in satisfactory condition.

At all times that the train was in motion an observer was assigned to a shelter provided on the anchor car. He was furnished with an intercommunication system connecting him with the locomotive engineer so that, if any rail movement indicating possible trouble should be observed, he could take steps to stop the train to permit the difficulty to be corrected.

No Trouble—The railroad reports that these special instructions for movement of the train were closely observed and no difficulties of any kind were encountered on the trip. H. R. Peterson, chief engineer, said: "I think this movement demonstrates that long lengths of welded rail can be safely and easily moved over any distance, around any curvature, and up and down any grade on any railroad in the United States."

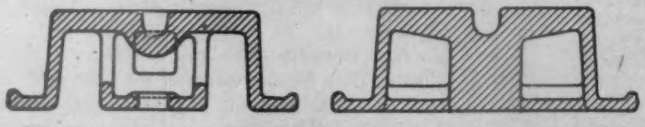
Cut your crossing maintenance costs w



THIS IS A TYPICAL pedestal-base U·S·S Manganese Steel Railroad Crossing installed at a point where the Birmingham and Southern crosses the St. Louis-San Francisco. About 85,000 gross tons of traffic pass over the crossing every 24 hours, and at the time this picture was taken, after more than two years of service, this crossing had handled over 75,000,000 gross tons of rolling stock and was still in very good condition.

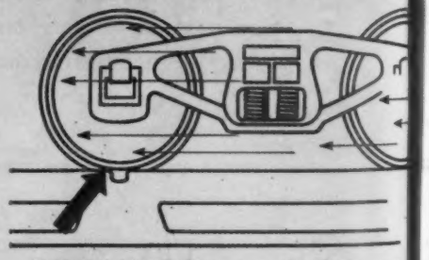
PEDESTAL BASE

THIS CUT-AWAY VIEW shows the pedestal base of solid metal located directly under the crossing intersection. More liquid metal is used in casting this type of intersection; so, in addition to providing extra vertical support, the entire casting is sounder and freer of internal flaws that usually lead to failure.

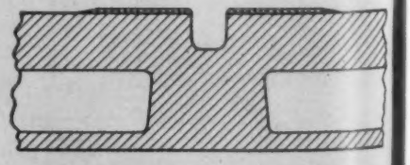


THESE TWO cross-section views of (left) an old-style intersection and (right) a pedestal-base intersection clearly show the extra vertical support provided by the sturdier pedestal-base construction. Ordinary intersections are hollow underneath the flangeway intersections at the point where they need the greatest strength.

DEPTH HARDENING



AS SHOWN ABOVE, the corners of ordinary manganese railroad crossings, which are hardened to only 200 Brinell in the shop, are pounded down about ¼" by the batter of train wheels and require extensive rebuilding.



ON DEPTH-HARDENED U·S·S Manganese Steel Crossings a ⅜" x 5" pad is cast integrally on each critical corner of intersections. This pad then is hammered to a hardness of 400 Brinell and ground to surface level before installation. This minimizes the damaging effects of wheel batter.

with stronger, more durable

U·S·S MANGANESE STEEL RAILROAD CROSSINGS

U·S·S MANGANESE STEEL RAILROAD CROSSINGS provide the extra strength and durability so necessary in crossings that must stand up under constant pounding from today's faster, heavier trains. In addition, these crossings require a minimum of maintenance, and, therefore, reduce costs and service interruptions.

Both improved design and improved metallurgical practice contribute to the outstanding performance of U·S·S Manganese Steel Railroad Crossings.

Unique Pedestal Base Assures Extra Strength and Longer Life

In these crossings, a pedestal base—a solid column of tough manganese steel—provides extra vertical support right where it's needed most: at the intersections, where wheel pounding is most severe. This pedestal base is many times stronger than the rib construction typical of ordinary crossings; and its extra support reduces deflections caused by wheel batter, a major cause of internal cracks that eventually lead to failure.

An improved method of casting adds additional strength and reliability. To minimize porosity and cavities characteristic of ordinary manganese castings, 5 to 10 times as much feed metal is used for these pedestal-type crossings as for other types, and the feed is much more closely controlled. This practice results in an improved casting.

Depth Hardening for Minimum Maintenance

U·S·S Manganese Steel Railroad Crossings are depth hardened to approximately 400 Brinell *before* leaving the shop. In other manganese crossings, track surfaces are hardened to only about 200 Brinell before installation—the pounding of train wheels is depended on for additional hardening. This wheel pounding batters down the corners of intersections, and these corners must be built up again by welding and grinding.

This needless maintenance and expense is eliminated with U·S·S Depth-Hardened Railroad Crossings. Before they leave the shop, all intersections are *hammered* to a hardness of 400 Brinell—the hardness required for modern railroad service—and ground to surface level. This assures maximum durability and resistance to wheel wear.

ADVANTAGES OF U·S·S MANGANESE STEEL RAILROAD CROSSINGS

✓ Longer life
✓ Greatly reduced maintenance
✓ Extra strength

U·S·S for All Your Trackwork

The improvements in design and metallurgical practice that are used in U·S·S Manganese Steel Railroad Crossings are typical of the extra care and effort that go into the making of all United States Steel Trackwork products; so specify U·S·S for all your trackwork requirements. We supply joint bars, tie plates, switches, frogs, and special track layouts, including crossings. In all of these the U·S·S label assures you of top quality and service.

USS

UNITED STATES STEEL COMPANY, PITTSBURGH · COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA.
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

2-1493

UNITED STATES STEEL

Freight Operating Statistics of Large Railways — Selected Items

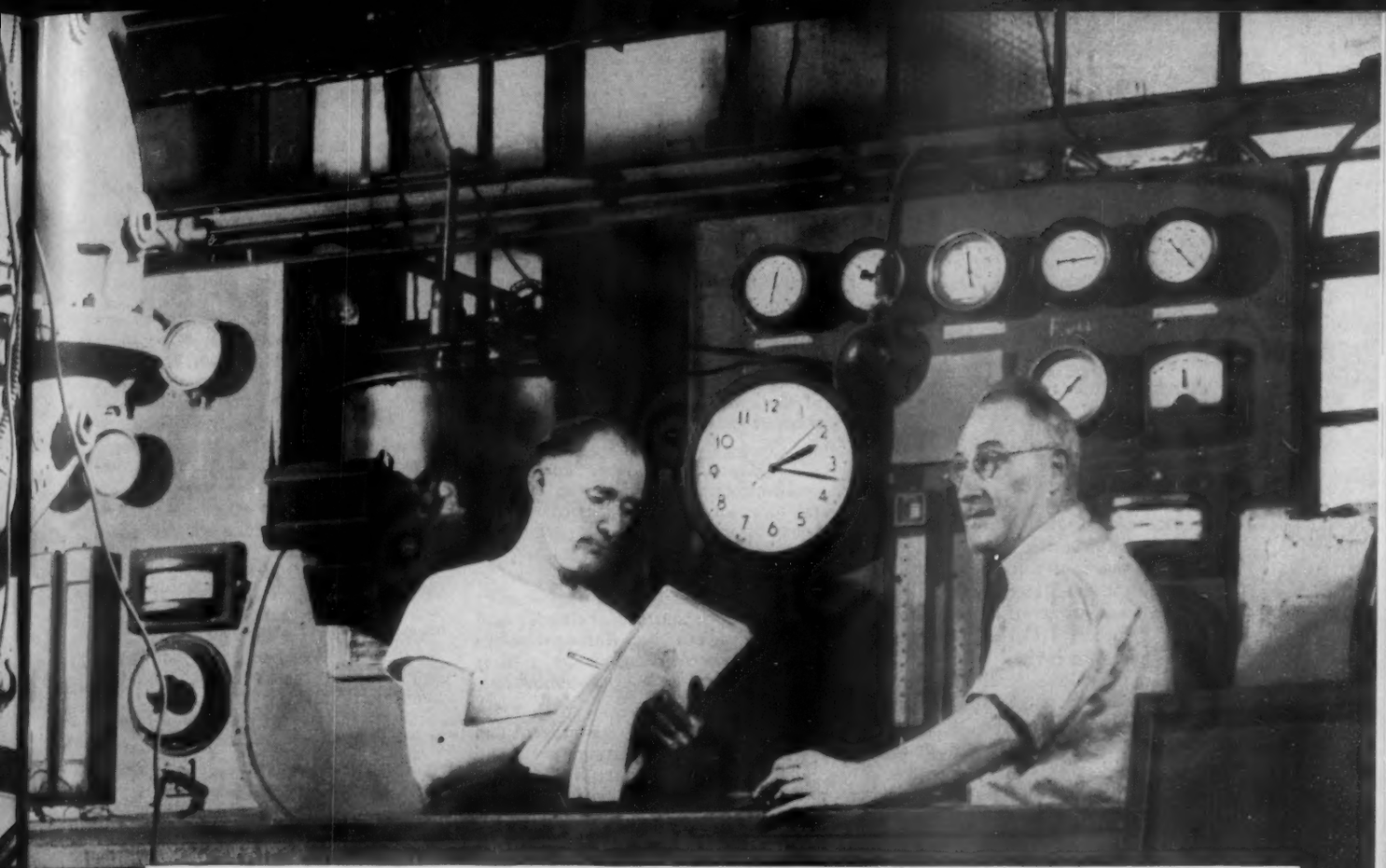
Region	Road	Year	Miles of road operated	Locomotive Miles: Train miles	Locomotive Miles: Principal and helper	Locomotive Miles: Light	Car Miles: Loaded (thousands)	Car Miles: Per cent loaded	Ton-miles (thousands): Gross excl.locos. & tenders	Ton-miles (thousands): Net rev. and non-rev.	Road-locos. on lines: Serviceable: Unstored	Road-locos. on lines: Serviceable: Stored	Road-locos. on lines: B.O.	Road-locos. on lines: Per cent B.O.
New Eng. Region	Boston & Maine	1953	1,668	253,639	257,901	9,020	8,954	67.6	568,410	231,425	77	5	7	7.9
		1952	1,690	243,664	246,852	7,623	8,005	68.3	509,553	210,635	82	12	11	10.5
	N. Y., N. H. & Htfd.	1953	1,748	298,066	298,148	19,187	11,292	67.1	703,135	289,845	91	..	2	2.2
		1952	1,765	269,457	269,711	24,462	9,737	67.3	612,226	256,245	95	..	4	4.0
Great Lakes Region	Delaware & Hudson	1952	793	201,082	206,109	10,231	9,147	68.5	637,270	328,164	46	..	..	..
		1952	793	194,873	211,208	9,570	7,814	66.6	536,370	260,931	72	37	12	9.9
	Del., Lack. & Western	1953	962	270,875	284,713	24,782	12,073	67.8	793,616	350,882	66	..	..	..
		1952	962	246,191	257,536	22,880	10,361	66.6	672,609	286,379	68	4	6	7.7
	Erie	1953	2,237	609,491	613,730	28,609	32,984	66.6	2,114,323	839,911	166	..	3	1.8
		1952	2,242	528,004	532,459	24,221	27,859	65.7	1,747,691	656,222	158	16	1	.6
	Grand Trunk Western	1953	952	278,322	284,020	1,753	8,577	60.6	607,717	249,343	62	3	13	16.7
		1952	952	210,150	217,894	2,283	6,732	61.4	470,304	198,786	53	..	13	19.7
	Lehigh Valley	1953	1,151	229,497	233,070	7,787	10,975	66.8	754,072	352,896	32	..	1	3.0
		1952	1,206	205,955	209,215	8,027	8,958	62.7	607,491	263,582	31	3	1	2.9
	New York Central	1953	10,667	2,650,174	2,715,110	105,521	99,231	59.8	7,203,258	3,163,649	729	56	156	16.6
		1952	10,668	2,375,335	2,439,864	100,287	82,727	60.3	5,839,417	2,486,629	747	163	203	18.2
	New York, Chic. & St. L.	1953	2,161	788,900	819,620	7,590	29,928	65.1	2,123,270	946,937	214	10	29	11.5
		1952	2,160	643,209	665,499	7,010	24,055	63.3	1,655,605	679,097	176	26	50	19.8
	Pitts. & Lake Erie	1953	221	74,399	75,419	120	3,210	65.7	276,221	168,732	24	6	6	16.7
		1952	221	35,118	35,358	....	1,656	60.4	144,991	84,694	30	9	11	22.0
	Wabash	1953	2,381	573,454	579,125	8,744	24,833	66.5	1,622,528	650,652	104	17	26	17.7
		1952	2,381	478,773	481,020	7,465	19,567	67.6	1,265,002	515,009	103	29	37	21.9
Central Eastern Region	Baltimore & Ohio	1953	6,081	1,670,790	1,847,284	184,158	66,786	62.4	5,146,128	2,527,649	500	28	104	16.5
		1952	6,082	1,271,642	1,397,828	129,964	49,425	62.4	3,701,963	1,736,964	476	116	167	22.0
	Bessemer & Lake Erie	1953	213	63,820	70,112	274	3,530	57.9	433,536	279,681	18	27	..	..
		1952	212	21,342	21,575	68	771	57.2	85,171	52,788	16	25	11	21.2
	Central of New Jersey	1953	617	129,232	134,893	10,178	4,945	66.3	369,330	192,848	72	9	6	6.9
		1952	618	122,830	127,135	10,612	4,735	66.2	332,098	170,402	60	6	8	10.8
	Chicago & Eastern Ill.	1953	868	123,959	123,959	2,526	5,152	66.9	349,662	169,600	28	..	1	3.4
		1952	868	109,826	109,826	2,447	3,892	67.8	260,741	125,878	25	..	2	7.4
	Elgin, Joliet & Eastern	1953	236	99,128	99,840	....	3,091	64.8	246,853	134,469	39	..	2	4.9
		1952	236	42,068	42,709	....	1,401	67.9	100,258	51,881	23	19	..	..
	Pennsylvania System	1953	9,939	3,244,258	3,469,692	303,356	130,907	63.5	9,664,811	4,646,080	1,050	134	317	21.1
		1952	9,961	2,291,119	2,421,437	216,176	96,377	62.5	6,703,300	2,987,935	963	149	407	26.8
	Reading	1953	1,389	327,093	333,299	16,365	12,425	62.5	987,271	506,883	179	24	14	6.5
		1952	1,320	264,769	268,146	16,064	10,165	61.4	808,079	415,053	168	36	29	12.4
	Western Maryland	1953	831	167,288	183,406	13,986	5,969	64.2	492,398	277,455	82	32	4	3.4
		1952	836	127,758	139,593	14,427	3,967	61.4	321,968	172,251	104	28	16	10.8
Pocahontas Region	Chesapeake & Ohio	1953	5,034	1,268,545	1,294,152	34,441	55,013	57.4	4,695,415	2,554,666	424	42	151	24.5
		1952	5,036	1,090,301	1,123,253	35,160	47,542	55.8	4,074,223	2,194,873	409	101	157	23.5
	Norfolk & Western	1953	2,113	641,690	673,004	45,715	29,651	58.5	2,622,638	1,402,621	211	33	20	7.6
		1952	2,113	569,660	596,642	30,793	24,177	58.4	2,136,205	1,135,608	220	45	16	5.7
Southern Region	Atlantic Coast Line	1953	5,367	743,064	743,092	9,356	22,008	60.1	1,573,378	708,512	243	..	5	2.0
		1952	5,461	781,738	781,946	7,941	21,872	60.4	1,586,330	730,150	277	21	18	5.7
	Central of Georgia	1953	1,754	198,116	198,168	2,467	6,969	66.8	477,218	221,293	67	..	2	2.9
		1952	1,754	194,945	198,079	2,804	6,441	67.7	431,220	196,647	81	8	4	4.3
	Gulf, Mobile & Ohio	1952	2,718	313,083	313,083	329	16,016	69.4	1,090,119	533,525	86	..	3	3.4
		1951	2,718	314,281	314,281	309	15,110	69.6	1,012,740	487,672	80	..	6	7.0
	Illinois Central	1953	6,538	1,420,785	1,423,099	48,016	50,578	62.9	3,675,540	1,700,734	536	68	62	9.3
		1952	6,539	1,353,144	1,357,353	44,690	45,992	62.1	3,315,305	1,498,090	516	52	78	12.1
	Louisville & Nashville	1953	4,728	951,750	999,294	19,063	33,102	63.1	2,446,613	1,232,695	246	76	30	8.5
		1952	4,756	819,142	847,250	16,711	26,714	63.5	1,904,507	930,363	232	87	34	9.6
	Nash., Chatt. & St. Louis	1953	1,032	178,403	182,567	3,484	5,941	69.5	392,470	184,394	48	..	4	7.7
		1952	1,032	186,779	189,812	3,173	5,619	70.0	374,538	176,925	49	8	5	8.1
	Seaboard Air Line	1953	4,068	553,682	553,682	736	20,955	63.4	1,482,699	670,148	141	12	6	3.8
		1952	4,135	549,237	549,237	1,167	20,194	62.9	1,372,869	636,073	132	75	11	5.0
	Southern	1953	6,263	973,447	973,489	11,982	37,759	69.7	2,404,483	1,101,443	228	15	9	3.6
		1952	6,264	994,112	994,167	12,268	34,661	69.8	2,199,530	999,628	295	72	63	14.7
Northwestern Region	Chicago & North Western	1953	7,849	814,011	817,756	12,646	33,152	64.1	2,404,528	1,027,712	257	36	77	20.8
		1952	7,872	760,687	769,906	16,192	28,856	65.0	2,034,749	894,536	306	13	107	25.1
	Chicago Great Western	1952	1,435	139,514	139,514	193	8,183	69.5	556,061	261,413	32	..	2	5.9
		1952	1,441	148,465	148,583	1,807	8,000	66.9	597,867	296,660	33	..	2	5.7
	Chic., Milw., St. P. & Pac.	1953	10,662	1,075,491	1,092,839	34,558	42,487	63.0	2,987,901	1,327,249	343	48	38	8.9
		1952	10,663	1,146,322	1,176,070	37,354	40,639	61.4	2,910,139	1,279,630	387	79	66	12.4
	Chic., St. P., Minn. & Omaha	1953	1,606	182,039	186,181	7,505	5,715	66.6	405,039	182,118	67	..	26	28.0
		1952	1,606	175,598	178,617	7,122	4,936	69.1	340,224	154,751	63	..	34	35.1
	Duluth, Missabe & Iron Range	1953	567	214,515	215,750	1,674	10,120	51.4	1,045,184	629,853	64	..	5	7.2
		1952	569	50,505	50,650	619	1,771	50.9	175,831	104,095	73	..	7	8.8
	Great Northern	1953	8,291	1,173,547	1,175,842	34,202	47,007	61.2	3,752,425	1,875,388	308	136	37	7.7
		1952	8,181	1,034,820	1,036,459	33,007	37,442	62.5	2,795,091	1,303,325	279	179	36	7.3
	Minneap., St. P. & S. S. M.	1953	4,172	414,029	419,383	5,175	13,953	66.0	944,050	449,002	107	..	9	7.8
		1952	4,172	376,343	381,400	2,702	11,929	65.1	818,084	387,675	110	2	7	5.9
	Northern Pacific	1953	6,583	906,273	934,224	37,763	35,117	64.7	2,554,981	1,218,443	314	18	64	16.2
		1952	6,585	856,259	879,785	35,623	32,684	63.3	2,414,976	1,051,327	339	12	52	12.9
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.)	1953	13,095	2,834,273	2,944,349	103,746	116,832	62.4	8,156,762	2,970,411	629	64	46	6.2
		1952	13,072	2,598,393	2,720,575	112,120	100,730	62.1	7,105,239	2,668,629	593	33	121	16.2
	Chic., Burl. & Quincy	1953	8,833	1,234,537	1,240,063	38,599	50,257	65.0	3,477,902	1,583,799	305	38	79	18.7
		1952	8,773	1,217,921	1,228,898	45,140	47,165	62.9	3,349,507	1,511,132	327	36	94	20.6
	Chic., Rock I. & Pac.	1953	7,883	1,071,470	1,078,563	7,228	39,559	61.8	2,885,217	1,232,115	170	7	10	5.3
		1952	7,902	1,093,865	1,111,528	11,087	37,202	59.3	2,808,380	1,185,446	206	26	40	14.7
	Denver & R. G. Wn.	1953	2,313	314,156	340,270	37,183	14,377	70.7	1,008,578	465,688	92	33	25	16.7
		1952	2,333	329,568	355,001	36,840	14,500	71.2	943,861	415,977	100	37	26	16.0
	Southern Pacific	1953	8,058	2,467,915	2,603,334	291,783	100,578	59.7	7,239,910	2,708,464	726	14	110	12.9
		1952	8,048	2,379,747	2,510,300	313,604	101,087	62.2	7,122,837	2,758,366	682	7	136	16.5
	Union Pacific	1953	9,824	2,776,949	2,866,463	189,116	105,328	61.1	7,488,211	3,023,328	621	75	135	16.2
		1952	9,843	2,470,411	2,551,411	165,138	96,188	63.0	6,702,740	2,719,083	588	60	147	18.5
	Western Pacific	1953	1,190	251,172	259,814	20,005	11,185	67.8	755,353	345,066	41	6	11	19.0
		1952	1,190	237,529	242,027	16,648	11,020	70.7	679,571	290,885	51	1	3	5.5
Southwestern Region	International-Gt. Northern*	1953	1,104	169,480	169,480	....	6,106	64.9	439,207	200,161	50	1	2	3.8
		1952	1,104	166,887	166,887	6	4,698	61.7	442,538	195,061	58	4	6	8.8
	Kansas City Southern	1953	886	166,421	166,436	148	8,670	63.8	634,245	293,766	24	1	1	3.8
		1952	886	149,331	149,336	188	7,686	66.8	529,632	242,122	26	6	7	17.9
	Mo.-Kans.-Texas Lines	1953	3,230	385,927	385,927	4,435	14,567	64.8	960,585	410,941	88	7	..	..
		1952	3,230	388,047	388,421	5,263	13,645	64.1	918,490	404,869	92	7	8	7.5
	Missouri Pacific*	1953	6,917	1,249,557	1,253,968	15,306	47,553	65.6	3,279,724	1,448,863	300	28	68	17.2
		1952	6,933	1,251,752	1,256,506	15,951	44,484	64.9	3,118,533	1,404,782	323	18	51	13.0
	Texas & Pacific	1953	1,831	357,417	357,417	3,691	15,278	61.3	1,091,845	397,191	59	..	..	..
		1952	1,832	352,679	352,679	3,879	13,782	61.2	986,842	361,570	65	7	6	7.7
	St. Louis-San Francisco	1953	4,564	616,257	616,490	6,012	22,746	64.4	1,573,323	704,349	189	..	3	1.6
		1952	4,567	608,033	608,121	5,975	21,658	62.6	1,509,517	660,097	185	15	24	10.7
	St. Louis Southw. Lines	1953	1,561	318,795	318,795	4,282	14,697	71.9	910,743	407,115	61	16	9	10.5
		1952	1,562	328,343	328,443	4,442	12,891	71.9	781,342	349,271	54	35	11	11.0
	Texas & New Orleans	1953	4,279	779,889	778,889	10,001	27,129	61.5	1,924,566	818,107	192	..	30	13.5
		1952	4,280	767,410	767,654	14,310	25,738	61.6	1,824,752	771,708	227	..	24	9.6

For the Month of July 1953 Compared with July 1952

Region, Road and Year		Freight cars on line: Home	Foreign	Total	Per Cent B.O.	G.t.m.per train-hr. excl.locos. and tenders	G.t.m.per train-mi. excl.locos. and tenders	Net ton-mi. per train-mile	Net ton-mi. per l'd car-mile	Net ton-mi. per car-day	Car miles per car-day	Net daily ton-mi. per road-mi.	Train-miles per train-hour	Miles per loco per day
New Eng. Region	Boston & Maine 1953	1,612	7,395	9,007	1.9	37,001	2,245	914	25.8	798	45.7	4,476	16.5	101.8
	1952	1,693	6,951	8,644	2.9	34,810	2,094	866	26.3	775	43.2	4,021	16.6	84.6
	N. Y., N. H. & Hfd. 1953	2,216	12,869	15,085	2.7	38,067	2,359	972	25.7	606	35.2	5,349	16.1	125.1
	1952	2,052	12,184	14,236	5.0	34,233	2,274	952	26.3	572	32.3	4,683	15.1	107.8
Great Lakes Region	Delaware & Hudson 1952	4,805	5,602	10,407	5.0	57,902	3,186	1,641	35.9	1,065	43.3	13,349	18.3	120.7
	1952	6,941	4,675	11,616	3.0	53,344	2,767	1,346	33.4	787	35.4	10,614	19.4	62.0
	Del., Lack. & Western 1953	6,660	9,389	16,058	5.2	49,891	2,987	1,321	29.1	717	36.4	11,766	17.0	166.8
	1952	5,755	7,783	13,538	5.7	45,036	2,779	1,183	27.6	651	35.4	9,603	16.5	128.9
	Erie 1953	8,532	19,772	28,304	3.5	62,846	3,506	1,393	25.5	949	56.0	12,112	18.1	135.5
	1952	10,899	16,100	26,999	3.8	58,512	3,340	1,254	23.6	809	52.3	9,442	17.7	113.9
	Grand Trunk Western 1953	3,598	8,794	12,392	5.4	44,827	2,196	901	29.1	632	35.9	8,449	20.5	129.9
	1952	4,240	8,691	12,931	4.5	43,310	2,253	952	29.5	500	27.6	6,736	19.4	115.9
	Lehigh Valley 1953	6,308	10,045	16,353	5.3	64,555	3,336	1,561	32.2	678	31.6	9,890	19.6	245.2
	1952	5,246	6,843	12,089	7.6	61,357	2,986	1,296	29.4	670	36.3	7,050	20.8	205.9
	New York Central 1953	68,629	90,635	159,264	9.0	46,194	2,755	1,210	31.9	633	33.2	9,567	17.0	106.2
	1952	73,635	70,765	144,400	10.6	41,786	2,497	1,063	30.1	542	29.9	7,519	17.0	81.8
	New York, Chic. & St. L. 1953	7,678	19,097	26,775	5.6	47,986	2,740	1,222	31.6	1,174	57.0	14,135	17.8	116.7
	1952	8,308	15,295	23,603	7.9	47,745	2,605	1,068	28.2	976	54.6	10,142	18.5	94.5
	Pitts. & Lake Erie 1953	3,437	8,279	11,716	7.4	55,678	3,718	2,271	52.6	432	12.5	24,629	15.0	74.9
	1952	5,300	5,817	11,117	9.4	64,440	4,133	2,414	51.1	249	8.1	12,362	15.6	24.8
	Wabash 1953	8,355	11,114	19,469	8.9	63,507	2,848	1,142	26.2	1,060	60.8	8,815	22.4	136.5
	1952	8,428	12,163	20,591	6.8	56,395	2,659	1,082	26.3	773	43.5	6,977	21.3	99.4
Central Eastern Region	Baltimore & Ohio 1953	54,073	50,411	104,484	5.4	45,108	3,134	1,539	37.8	794	33.6	13,408	14.6	109.3
	1952	58,385	39,969	98,354	8.5	42,971	2,941	1,380	35.1	578	26.4	9,213	14.8	68.1
	Bessemer & Lake Erie 1953	5,068	1,382	6,450	11.2	107,764	6,933	4,473	79.2	1,406	30.6	42,357	15.9	56.8
	1952	7,228	1,304	8,532	9.7	54,388	4,211	2,610	68.5	200	5.1	8,032	13.6	16.0
	Central of New Jersey 1953	3,628	9,804	13,432	9.8	38,661	3,012	1,573	39.0	446	17.3	10,083	13.5	75.8
	1952	3,269	10,767	14,036	10.3	34,980	2,858	1,466	36.0	380	15.9	8,895	12.9	85.2
	Chicago & Eastern Ill. 1953	2,677	4,174	6,851	6.7	44,737	2,862	1,388	32.9	822	37.3	6,303	15.9	153.3
	1952	3,011	2,791	5,802	2.2	38,159	2,386	1,152	32.3	668	30.5	4,678	16.1	142.2
	Elgin, Joliet & Eastern 1953	6,981	11,706	18,687	5.2	20,592	2,616	1,425	43.5	226	8.0	18,380	8.3	102.6
	1952	8,065	9,652	17,717	4.6	21,612	2,503	1,295	37.0	93	3.7	7,091	9.1	45.1
	Pennsylvania System 1953	104,502	99,148	203,650	8.1	49,996	3,072	1,477	35.5	737	32.7	15,079	16.8	88.0
	1952	93,179	110,450	203,629	11.4	49,675	2,994	1,335	31.0	467	24.1	9,676	17.0	61.6
	Reading 1953	15,512	16,905	32,417	6.3	39,562	3,019	1,550	40.8	507	19.9	12,491	13.1	67.0
	1952	18,487	15,120	33,607	6.9	39,635	3,053	1,568	40.8	408	16.3	10,143	13.0	49.2
	Western Maryland 1953	6,003	3,408	9,411	5.2	42,350	2,987	1,683	46.5	1,029	34.4	10,770	14.4	57.8
	1952	6,894	2,109	9,003	3.5	37,482	2,547	1,363	43.4	620	23.3	6,647	14.9	37.0
Pocahontas Region	Chesapeake & Ohio 1953	50,903	27,030	77,933	3.0	66,374	3,716	2,022	46.4	1,052	39.5	16,370	17.9	73.6
	1952	51,449	22,281	73,730	3.9	65,100	3,760	2,026	46.2	952	36.9	14,059	17.4	59.6
	Norfolk & Western 1953	31,803	7,608	39,411	3.0	71,759	4,156	2,222	47.3	1,161	41.9	21,413	17.6	94.3
	1952	36,427	6,973	43,400	3.4	63,794	3,810	2,025	47.0	867	31.6	17,337	17.0	79.4
Southern Region	Atlantic Coast Line 1953	16,496	16,080	32,576	2.2	36,602	2,124	957	32.2	714	36.9	4,258	17.3	109.1
	1952	16,006	14,467	30,473	3.4	35,107	2,036	937	33.4	747	37.0	4,313	17.3	89.1
	Central of Georgia 1953	2,799	5,003	7,802	3.9	42,838	2,420	1,122	31.8	887	41.8	4,070	17.8	91.2
	1952	2,785	5,336	8,121	6.4	37,757	2,227	1,016	30.5	775	37.5	3,617	17.1	75.0
	Gulf, Mobile & Ohio 1952	4,785	9,751	14,536	3.7	67,399	3,494	1,710	33.3	1,211	52.4	6,332	19.4	121.9
	1951	4,780	9,628	14,408	3.7	63,083	3,228	1,554	32.3	1,098	48.9	5,788	19.6	126.7
	Illinois Central 1953	26,050	23,863	49,913	2.6	44,918	2,629	1,217	33.6	1,050	49.6	8,391	17.4	76.8
	1952	30,276	24,860	55,136	2.9	42,988	2,482	1,122	32.6	889	44.0	7,390	17.5	74.5
	Louisville & Nashville 1953	33,873	14,049	47,922	3.5	43,920	2,579	1,299	37.2	861	36.7	8,410	17.1	100.7
	1952	36,747	13,004	49,751	5.0	38,713	2,329	1,138	34.8	627	28.4	6,310	16.7	85.3
	Nash., Chatt. & St. Louis 1953	2,293	4,269	6,562	2.8	41,580	2,206	1,037	31.0	933	43.3	5,764	18.9	123.6
	1952	2,136	4,590	6,726	5.3	38,036	2,010	949	31.5	891	40.7	5,530	19.0	110.1
	Seaboard Air Line 1953	11,250	12,493	23,743	2.3	47,683	2,702	1,221	32.0	935	46.1	5,314	17.8	314.6
	1952	10,714	11,650	22,364	2.6	45,175	2,523	1,169	31.5	897	45.3	4,962	18.1	87.3
	Southern 1953	16,248	27,545	43,793	2.9	43,009	2,487	1,139	29.2	809	39.8	5,673	17.4	126.5
	1952	14,081	25,805	39,886	3.6	37,858	2,224	1,011	28.8	788	39.2	5,148	16.1	80.9
Northwestern Region	Chicago & North Western 1953	23,153	29,785	52,938	4.9	49,529	3,063	1,309	31.0	633	31.8	4,224	16.8	80.5
	1952	24,570	34,029	58,599	3.5	42,500	2,808	1,234	31.0	510	25.3	3,666	15.9	66.2
	Chicago Great Western 1952	1,297	4,785	6,082	3.0	70,809	3,996	1,879	31.9	1,320	59.5	5,876	17.8	139.0
	1952	1,867	5,900	7,767	2.5	71,022	4,041	2,005	37.1	1,303	52.5	6,641	17.6	144.6
	Chic., Milw., St. P. & Pac. 1953	35,678	33,110	68,788	5.8	48,806	2,794	1,241	31.2	633	32.2	4,016	17.6	90.2
	1952	38,046	30,215	68,261	4.1	43,769	2,554	1,123	31.5	619	32.0	3,871	17.2	80.5
	Chic., St. P., Minn. & Omaha 1953	1,135	7,715	8,850	4.9	31,494	2,300	1,034	31.9	678	31.9	3,658	14.2	73.3
	1952	959	8,038	8,997	4.0	29,034	1,998	909	31.4	579	26.7	3,108	15.0	69.6
	Duluth, Missabe & Iron Range 1953	14,538	917	15,455	3.2	83,782	5,134	3,094	62.2	1,311	41.0	35,834	17.2	117.6
	1952	14,795	2,051	16,846	1.1	56,051	3,633	2,151	58.8	203	67.8	5,901	16.1	23.5
	Great Northern 1953	25,598	24,428	50,026	3.1	51,057	3,235	1,617	39.9	1,267	51.9	7,297	16.0	87.7
	1952	27,102	22,373	49,475	3.4	45,835	2,722	1,269	34.8	887	40.8	5,139	17.0	75.1
	Minneap., St. P. & S. S. M. 1953	7,190	7,132	14,322	6.4	43,593	2,289	1,089	32.2	999	47.0	3,472	19.1	130.1
	1952	7,837	8,408	16,245	7.2	40,976	2,185	1,035	32.5	784	37.0	2,998	18.9	115.5
	Northern Pacific 1953	21,943	16,999	38,942	5.9	51,693	2,841	1,355	34.7	1,041	46.4	5,971	18.3	86.0
	1952	22,238	16,174	38,412	5.3	48,811	2,840	1,236	32.8	919	45.1	5,150	17.3	79.2
Central Western Region	Atch., Top. & S. Fe (incl. G. C. & S. F. and P. & S. F.) 1953	51,022	35,028	86,050	3.2	63,901	2,893	1,054	25.4	1,059	66.7	7,317	22.2	140.7
	1952	54,597	31,733	86,330	3.8	57,354	2,757	1,035	26.5	956	58.1	6,585	21.0	126.7
	Chic., Burl. & Quincy 1953	21,035	23,193	44,228	3.1	53,125	2,826	1,287	31.5	1,156	56.4	5,784	18.9	104.2
	1952	18,916	25,722	44,638	4.1	51,900	2,762	1,246	32.0	1,068	53.0	5,556	18.9	94.0
	Chic., Rock I. & Pac. 1953	11,958	22,055	34,013	4.8	50,524	2,710	1,157	31.1	1,098	57.0	5,042	18.8	192.2
	1952	13,718	21,794	35,512	3.4	46,729	2,589	1,093	31.9	1,031	54.5	4,839	18.2	140.3
	Denver & R. G. Wn. 1953	7,247	8,445	15,692	3.0	59,750	3,218	1,486	32.4	1,051	45.9	6,495	18.6	81.8
	1952	7,930	8,339	16,269	3.7	57,849	2,871	1,265	28.7	930	45.5	5,752	20.2	82.6
	Southern Pacific 1953	30,944	46,637	77,581	2.6	51,546	2,961	1,108	26.9	1,124	69.9	10,843	17.6	118.9
	1952	28,558	45,496	74,054	2.8	50,920	3,031	1,174	27.3	1,172	69.1	11,056	17.0	119.4
	Union Pacific 1953	31,957	36,056	68,013	2.2	65,620	2,731	1,103	28.7	1,495	85.2	9,927	24.3	121.8
	1952	33,354	33,873	67,227	2.9	64,166	2,744	1,113	28.3	1,340	75.2	8,911	23.6	114.2
	Western Pacific 1953	2,293	4,310	6,603	5.1	71,172	3,020	1,380	30.9	1,782	85.2	9,354	23.7	164.7
	1952	2,473	5,030	7,503	5.9	67,740	2,903	1,242	26.4	1,493	80.0	7,885	23.7	170.6
Southwestern Region	International-Gt. Northern* 1953	765	5,837	6,602	3.6	51,769	2,598	1,184	32.8	863	40.5	5,849	20.0	107.2
	1952	1,014	7,325	8,339	2.2	53,356	2,665	1,175	41.5	754	29.4	5,700	20.1	87.9
	Kansas City Southern 1953	916	6,136	7,052	2.9	76,213	3,824	1,771	33.9	1,357	62.7	10,696	20.0	221.5
	1952	1,295	6,099	7,394	4.9	72,137	3,555	1,625	31.5	1,072	51.0	8,815	20.3	138.0
	Mo.-Kans.-Texas Lines 1953	3,967	6,676	10,643	4.9	52,070	2,496	1,068	28.2	1,171	64.1	4,104	20.9	144.7
	1952	4,334	6,289	10,623	11.5	47,519	2,369	1,044	29.7	1,130	59.4	4,043	20.1	129.6
	Missouri Pacific* 1953	18,503	17,766	36,269	2.9	56,748	2,639	1,166	30.5	1,257	62.9	6,737	21.6	109.5
	1952	21,818	15,639	37,457	3.0	51,709	2,505	1,129	31.6	1,165	56.9	6,536	20.8	113.6
	Texas & Pacific 1953	2,172	7,308	9,480	3.7	70,638	3,060	1,113	26.0	1,316	82.5	6,998	23.1	206.0
	1952	2,791	6,471	9,262	4.2	65,935	2,798	1,025	26.2	1,210	75.4	6,367	23.6	135.7
	St. Louis-San Francisco 1953	11,320	11,509	22,829	3.3	45,270	2,557	1,145	31.0	922	46.2	4,978	17.7	217.4
	1952	12,408	13,133	25,541	2.7	45,315	2,494	1,090	30.5	812	42.5	4,662	18.3	98.6
	St. Louis Southw. Lines 1953	2,201	5,099	7,300	1.8	59,678	2,859	1,278	27.7	1,855	93.2	8,413	20.9	128.6
	1952	2,267	4,755	7,022	1.7	50,888	2,383	1,065	27.1	1,615	82.9	7,213	21.4	114.8
	Texas & New Orleans 1953	5,466	14,106	19,572	1.5	49,795	2,489	1,058	30.2	1,295	69.8	6,167	20.2	118.9
	1952	5,427	15,425	20,852	3.2	47,313	2,393	1,012	30.0	1,179	63.8	5,816	19.9	106.3

*Report of trustee or trustees.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.



Cut locomotive maintenance costs by three proven methods

Railroads throughout the country now have their choice of Alco's three distinct repair services for handling—with new savings—their locomotive maintenance operations. These three services are: repair and return, unit exchange, and "on-line" rebuild on the railroad's premises under Alco supervision.

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AMERICAN LOCOMOTIVE COMPANY

SALES AND SERVICE OFFICES IN PRINCIPAL CITIES

THE NEW HAVEN POSES . . .

20 Questions on "Piggy-Backs"

OFF AND ON since 1932 the New Haven has experimented with the idea of moving truck trailers on flat cars in what it terms "trailiner" service. In recent years the idea caught on, but with growth have come problems.

Now the road wants the I.C.C. to step in and clear up the "substantial uncertainty" that surrounds this service. A petition has been filed with the commission, asking that a proceeding be instituted; that all railroads, associations of motor carriers, freight forwarders and associations of shippers be invited to participate.

From this investigation, the New Haven hopes to obtain a "declaratory order" clearing up these 20 "substantial and practical" questions on "piggy-backs:"

THE QUESTIONS:

1. May the petitioner restrict trailiner service exclusively to motor common carriers?

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2. May the petitioner restrict trailiner service to motor common carriers and private carriers?

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3. May the petitioner limit the number of motor common carriers and private carriers who may use the trailiner service? In this connection, may petitioner allocate its flat cars on any basis it elects; if not, what basis must be used?

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4. May the petitioner refuse to provide trailiner service to contract carriers or freight forwarders or private carriers?

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5. If the petitioner must provide trailiner service to contract carriers and freight forwarders, what tariffs must be published to provide such service?

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6. Is the relationship between motor common carriers using trailiner service and petitioner that of connecting carriers?

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7. If the relationship between motor common carriers and petitioner is that of connecting carriers, may a contract carrier or a private carrier or a freight forwarder, employing trailiner service, be deemed a connecting carrier?

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8. May motor common carriers and petitioner through the medium of trailiner service establish through routes and joint rates; if they may, what tariffs must they publish; if they may not, how shall each carrier involved reflect in its tariff publication the use of the trailiner service and the assessment of charges therefor?

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9. May the petitioner and motor common carriers divide the revenue produced by the motor carrier rate when trailiner service is performed; if they may, what tariffs must they publish?

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10. May contract carriers and petitioner enter into through routes and joint rate arrangements; if they may, what tariffs must they publish?

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11. May freight forwarders and petitioner enter into through route and joint rate arrangements; if they may, what tariffs must they publish?

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12. May contract carriers and petitioner divide the revenue derived from the through service when trailiner service is performed; if they may, what tariffs must they publish?

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13. May freight forwarders and petitioner divide the revenue derived from the through service when trailiner service is performed; if they may, what tariffs must they publish?

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14. Is there any relationship or status of contract, lease or ownership between a contract motor carrier and a motor common carrier which would authorize or permit petitioner to enter into a through route and joint rate arrangement with the contract carrier in order to render trailiner service?

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15. Is there any such relationship or status between a private carrier and a motor common carrier or between a freight forwarder and a motor common carrier which would enable petitioner to enter into a through route and joint rate arrangement with the private carrier or the freight forwarder in order to render trailiner service?

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16. In providing trailiner service may petitioner enter into through route and joint rate arrangements and divide revenue with a motor common carrier who uses trailers leased to it by a freight forwarder, private carrier or contract carrier or who employs personnel of such other private or contract carrier or freight forwarder to perform the highway haulage which precedes the loading of the vehicle on the petitioner's flat cars; and, in such cases, does the identification of the trailers tendered to petitioner, as leased to or controlled by the motor common carrier involved, change or otherwise affect the legal rights and responsibilities of the parties? If such service is permitted, which carrier must pay petitioner for the trailiner service thus provided?

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17. May the petitioner enter into a through route and joint rate arrangement with a freight forwarder who has a contract or other arrangement with a motor common carrier; and may the freight forwarder employ the vehicles of the motor common carrier in obtaining trailiner service; if it may, may petitioner divide revenue with the freight forwarder and, if so, what tariffs must be published?

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18. If a freight forwarder has a contract with a motor carrier and if the trailer tendered to the petitioner carries the identification of the common carrier, may the petitioner provide the trailiner service and divide the revenue with the motor common carrier on the basis of the division sheet (Division Sheet No. F517-B) previously referred to; in such instance which party, namely, freight forwarder or motor common carrier, must pay petitioner for the trailiner service rendered?

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19. Assuming that a motor common carrier is authorized to transport only limited commodities (enumerated in its certificate of public convenience and necessity) between New York and Boston, and assuming that the trailer tendered by such motor common carrier to petitioner for trailiner service contains general commodities which this motor carrier is not authorized to transport, may the petitioner accept and transport the trailer on behalf of the motor common carrier; if it may, what tariff authority is required; if it may not, what responsibility and duty does the petitioner have to determine: (a) the operating authority of the motor common carrier, and (b) the contents of the trailers?

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20. Is the transportation in trailiner service deemed transportation merely of a trailer or of a trailer containing specific commodities? In other words, does trailiner service legally consist in the transportation of trailers irrespective of their lading or must a motor carrier tender for trailiner service only such trailers as contain commodities which the motor carrier is authorized to transport over the highways between points served in trailiner service?

KNUDSON SAYS ORDER CARS OR GOVERNMENT WILL ACT

U. S. railroads were warned last week to undertake steps "immediately" to reach the goal of 1,800,000 freight cars in service, lest they be faced with punitive action by government agencies. This warning was given October 8 by James K. Knudson, administrator of the Defense Transportation Administration and member of the Interstate Commerce Commission, at the annual meeting in Omaha of the National Association of Shippers Advisory Boards.

Mr. Knudson pointed out that the freight car fleet is currently 80,000 cars short of the goal agreed on by the member roads in the Association of American Railroads. Every effort is being made, he said, with the cooperation of the railroads, to build up the fleet to the 1,850,000 total at the earliest possible date. If steps are not taken at once to assure its realization, however, Mr. Knudson will go to the I.C.C., he declared, and seek a hearing on proceedings to secure a compliance order to compel the carriers to meet this car quota. As a last possible step, if such a compliance order should not be effective in getting the cars built speedily, Mr. Knudson would go to Congress, he said, and seek an appropriation to build the cars at public expense. This would be the last step he would want to take, because its result would be an entering wedge into government ownership of railroads.

A.A.R. President Faricy, speaking at the same convention, indicated the main reason railroads have not placed freight car orders in sufficient numbers to meet the 1,850,000 goal by July 1954 is the fact the I. C. C. has not seen fit up to this time to extend the Ex Parte 175 freight rate increase beyond 1955. "The overhanging threat of a rate structure which is temporary and subject to a self-limiting expiration date" makes it rather impossible for railroads to involve their credit for the next 10 or 15 years, he asserted.

(*Continued from page* 14)
plete or considered "adequate" in light of present requirements (*Railway Age*, September 21, page 8).

Railroads had three principal goals established in 1951-52. These included diesel locomotives, railroad miscellaneous facilities and freight cars. Of these, O.D.M. is reviewing diesels and miscellaneous facilities.

The Defense Transport Administration, meanwhile, has indicated it will oppose curtailment of any railroad expansion goals. Presentations to this effect have been submitted to O.D.M.

The latest O.D.M. "progress report" on mobilization, submitted to the President on October 2, indicated that O.D.M. feels the diesel program has reached an "advanced stage." At the same time, the agency was less satisfied with progress on the freight car program.

"Freight car production is averaging less than 6,000 cars a month," O.D.M. reported. "This rate," the agency added, "is considerably less than the objective of 10,000 cars per month established in 1951."

Controls on Nickel Will End November 1

Controls on the distribution of nickel and its use in the civilian economy will be revoked, effective November 1.

The action will be taken by the Business and Defense Services Administration upon direction from Secretary of Commerce Weeks. B.D.S.A. will revoke the entire Order M-80, except for columbium and tantalum. The revocation will remove all restrictions on the use of nickel, nickel silver, and nickel-bearing stainless steel.

LOCOMOTIVES

The **Frisco's** board of directors has authorized acquisition of five 1,500-hp. "B" road freight units at a cost of $762,408.

The **Georgia** has ordered two 1,500-hp. general purpose diesel units from the Electro-Motive Division of General Motors Corporation for delivery in November.

RAILROADER AND STEAMSHIP MAN get together. Frederic B. Whitman, president of the Western Pacific, is greeted by Donald Watson, vice-president and general manager of the Weyerhaeuser Steamship Company and president of the Propeller Club of San Francisco, on the occasion of his talk before the steamship men. Mr. Whitman is also president of the San Francisco Bay Area Council, which represents all types of business, and his talk emphasized the mutuality of interest between the two types of carriers.

SANTA FE CASE MAY BECOME TEST OF UNION SHOP

The Santa Fe has been restrained from entering into a union shop contract by a temporary injunction issued in State District Court at Amarillo, Texas. The restraining order, sought by 15 Santa Fe employees—three of whom are union members—was issued by Judge E. C. Nelson who commented ". . . this is a matter of considerable importance, not only from the standpoint of the principals in the case, but for the country as a whole."

The state of Texas has a "right to work" statute. The Santa Fe case now becomes a test of whether or not state statutes of this kind take precedent over Federal legislation—including the 1951 amendment to the Railway Labor Act, and the Taft-Hartley Act, both of which permit union shop agreements—and whether or not such Federal legislation is constitutional. The Santa Fe employees are basing their case on grounds that the Federal legislation is unconstitutional and the railroad, although it is formally the party being sued, agrees and has filed cross-action accordingly.

Judge Nelson termed the employees rights "sufficiently certain and their danger sufficiently real and impending," for holding the restraining order in effect until after hearings for a permanent order are concluded. These hearings will begin November 16.

PASSENGER CARS

The **Chicago & North Western** has ordered 16 gallery-type double deck air-conditioned suburban coaches from the St. Louis Car Company at an approximate cost of $2,240,000. Seating capacity of each car will be 170. Deliveries are expected late in 1954.

Supply Trade

Charles E. Sampson, assistant resident manager of **General Railway Signal Company** at Chicago, has been appointed resident manager of the St. Louis district office, succeeding the late **Roy L. Morris.**

Edward J. Curtin, field engineer of **Barber-Greene Company,** has been made northeastern area sales manager, at Boston.

R. M. Stotsenburg has been appointed sales manager of Fielden Instrument division, **Robertshaw-Fulton Controls Company.** He was formerly with R.C.A. Victor division.

Henry V. Armagnac, sales representative in the New York area for **Lewis-Shepard Products, Inc.,** has

been made district manager of the Middle Atlantic region.

Raymond S. Perry, vice-president and director of sales of **Federal Telephone & Radio Co.,** a division of

Raymond S. Perry

International Telephone & Telegraph Corp., has been elected president, succeeding **Henry C. Roemer,** who has been named vice-president in charge of administration of the domestic division of I.T.&T. Mr. Perry joined the company in 1949 as general sales manager and since 1951 has, in addition, been vice-president and director of sales.

AVERY J. READING (above), sales manager of the Chipman Chemical Company's railroad division at Chicago, has been promoted to general manager of that division, and has been succeeded by CHARLES S. LANGDON (below).

"IT WAS A GREAT SHOW"

The Pullman-Standard Car Manufacturing Company has published a 22-page brochure containing hundreds of pictures taken during the Atlantic City conventions last June. Pictures of some of the events are as large as 14 inches, making it possible to spot familiar faces amid even the largest groups shown. There are also many pages of candid pictures showing both railroad and supply people in the convention hall and at the track exhibits.

Because many of the pictures were taken by Pullman-Standard photographers, they tend to center about the company's own exhibits. But because the emphasis is on men and women of the convention, more than on the equipment and displays, railroad men and suppliers alike may desire a copy. They can be obtained without charge by writing to H. W. Foster, advertising manager, Pullman-Standard Car Manufacturing Company, 79 East Adams Street, Chicago 3.

Warren H. Moyer, vice-president and treasurer of the **Chipman Chemical Company, Inc.,** at Bound Brook, N. J., has been elected president *(Railway Age,* August 31). Mr. Moyer joined Chipman Chemical in 1926 and was named manager of the railroad division in 1928. He became treasurer in 1932 and vice-president in 1940.

Fabian Bachrach

Warren H. Moyer

Charles P. Leese has been appointed vice-president, engineering, of **Standard Car Truck Company,** and **Ray C. Williams,** engineering assistant to president in charge of research and development work. Mr. Williams was formerly administrative engineer of the road and track equipment division, Pullman-Standard Car Manufac-

Charles P. Leese

turing Company. Mr. Leese has been with Standard Car Truck Company for 30 years, all of which have been spent in an engineering capacity. For the past eight years he has been assistant vice-president and chief engineer.

Frank P. Cullen, vice-president of the **Cullen-Friestedt Company** at Chicago, has assumed the office of president following the death of his father, **Frank J. Cullen** (*Railway Age,* June 29). **H. M. McFarlane,** sales manager has been promoted to vice-president in charge of sales.

H. M. McFarlane

S. Whitney Dickey, sales representative for the Brake Shoe & Castings division of **American Brake Shoe Company,** has been appointed district sales manager at New York.

Donald H. Herak, field engineer for the **Portland Cement Association,** has been named district engineer at Spokane, Wash.

Clark Equipment Company has appointed the **Crunkleton Company,** 5324 McCorkle avenue, S.E., Charleston, W. Va., as a distributor of its full line of equipment.

Abandonments

Denver & Rio Grande Western.—I.C.C. Examiner Paul C. Albus has recommended that the commission authorize this road to abandon 137.6 miles of its narrow-gage trackage, together with side tracks totaling 18.2 miles. Three lines are involved: Poncha Junction, Colo., to Sapinero, 93.51 miles; Gunnison to Crested Butte, 28.24 miles, and Gunnison to Castleton, 15.83 miles.

Examiner Albus advised the commission that operation of these segments during the past several years has been conducted at substantial losses. He said there are "no prospects of sufficient traffic in the future to offset such deficits."

New Facilities

Missouri Pacific.—Division 4 of the I.C.C. has approved relocation of this road's trackage between Kirwin, Kans., and Glade, to permit construction of the Kirwin Dam & Reservoir by the U.S. government. The road will abandon 10.3 miles of existing trackage, and the government is paying the cost of a new line of 9.9 miles. Total cost of the new line is estimated at $967,549.

Nashville, Chattanooga & St. Louis.—Three bridge projects currently in progress on the Huntsville and Chattanooga divisions represent an expenditure of $155,500. Company forces are reconstructing Bridge 53.3 on the Chattanooga division by replacing the three-span through girder bridge and pile trestle approaches with a 14-span concrete slab bridge. The Omah Construction Company, Nashville, Tenn., is grading and changing the channel of a creek to permit retirement of Bridge 111 on the Huntsville division. That company is also retiring that division's Bridge 100 and replacing it with three lines of 84-in. diameter pipe and fill.

St. Louis-San Francisco.—The directors have authorized installation of a 104-mi. telephone dispatching system between Neodesha, Kan., and Wichita, to replace the present telegraph system, at an approximate cost of $53,000.

Financial

Long Island.—*PRR Would Amend Revamp Plan.*—Among amendments proposed by the Pennsylvania for its reorganization plan for the Long Island (*Railway Age*, September 28, page 7), according to Walter S. Franklin, PRR president, is a provision for representation from Long Island counties on the board of the new company, to be designated by appropriate public bodies. Another amendment provides that instead of postponing taxes on real estate in years when earnings are insufficient, as proposed in the original plan, all real estate tax assessments would be fixed for six years at the level recently agreed upon by the city of New York in settlement of its back taxes.

Mr. Franklin pointed out that "reasonable fare increases, in addition to partial tax relief, undoubtedly will be required to make the plan succeed."

Pennsylvania-Southern Pacific.—*Sell Greyhound Common Stock.*—The SP's 33.7 per cent common stock interest in Pacific Greyhound Lines and the PRR's 50 per cent common stock interest in Pennsylvania Greyhound Lines have been purchased by the bus lines' parent, the Greyhound Corporation. Both railroads will retain certain preferred stock interests in the bus lines.

Securities

Authorizations

NEW YORK CENTRAL.—To issue $800,000 of 3¾ per cent promissory notes to the Bethlehem Steel Company in partial payment for 16 freight barges costing an estimated $1,070,400 (*Railway Age*, September 21, page 114). The barges will be used in handling freight traffic at the port of New York.

READING.—To assume liability for $3,420,000 of series V equipment trust certificates, to finance in part 24 diesel units costing an estimated $4,307,709 (*Railway Age*, September 14, page 16). Division 4 approved sale of the certificates for 99.65 with interest at 3½ per cent—the bid of Salomon Bros. & Hutzler and 3 associates—which will make the average annual cost of the proceeds to the road approximately 3.56 per cent. The certificates, dated October 1, will mature in 30 semiannual installments of $114,000 each, beginning April 1, 1954. They were reoffered to the public at prices yielding from 2.8 to 3.55 per cent, according to maturity.

SOUTHERN PACIFIC.—To assume liability for $5,250,000 of series KK equipment trust certificates, to finance in part 15 diesel units and 661 freight cars costing an estimated $7,018,365 (*Railway Age*, August 31, page 23). Division 4 approved sale of the certificates for 99.7113 with interest at 3⅜ per cent—the bid of Halsey, Stuart & Co. and 9 associates—which will make the average annual cost of the proceeds to road approximately 3.45 per cent. The certificates, dated September 1, will mature in 15 annual installments of $350,000 each, beginning September 1, 1954. They were reoffered to the public at prices yielding from 2.85 to 3.4 per cent, according to maturity.

Security Price Averages

	Oct. 6	Prev. Week	Last Year
Average price of 20 representative railway stocks	56.88	58.21	62.64
Average price of 20 representative railway bonds	89.95	89.73	92.49

Dividends Declared

ATLANTIC COAST LINE.—5% preferred, $2.50, semiannual, payable November 10 to holders of record October 23.

ELMIRA & WILLIAMSPORT.—$1.19, semiannual, payable November 2 to holders of record October 20.

RICHMOND, FREDERICKSBURG & POTOMAC.—common, 75¢; dividend obligation, 75¢, both payable October 1 to holders of record September 18.

ST. LOUIS, ROCKY MOUNTAIN & PACIFIC.—25¢, reduced, payable October 15 to holders of record October 1.

VERMONT & MASSACHUSETTS.—$3, semiannual, payable October 7 to holders of record September 30.

Railway Officers

EXECUTIVE

O. C. Grimshaw has been elected vice-president—traffic of the DETROIT, TOLEDO & IRONTON at Dearborn, Mich., to fill a vacancy caused by the death of **Elmer H. DeBoard** (*Railway Age* July 27). Mr. Grimshaw was born at Callao, Macon county, Mo., on September 26, 1900, and entered the service of the Pennsylvania in October 1922 as a stenographer in the traffic department. He advanced to the handling of rates, special agent—rates, commerce agent, chief clerk to freight traffic manager, district freight agent, assistant general freight agent, and assistant to general traffic manager, which position he held when elected vice-president—traffic of the DT&I.

O. C. Grimshaw

H. A. Greeniaus, assistant to operating vice-president, Prairie region of the CANADIAN PACIFIC at Winnipeg, has been transferred to Montreal, succeeding **J. N. Fraine,** who has been appointed general superintendent, Alberta district, at Calgary, succeeding **G. E. Mayne,** promoted. **M. A. Keays** has been appointed assistant to vice-president at Winnipeg, succeeding Mr. Greeniaus.

Guy O. Beale, vice-president—purchases of the CHESAPEAKE & OHIO at Cleveland, has retired after 45 years of service.

Clifton G. Brown has been appointed assistant to president of the LEHIGH & HUDSON RIVER at Warwick, N.Y., in addition to his duties as assistant secretary and assistant treasurer.

YOU CAN WIN $100!

Only six weeks remain to enter the *Railway Age* essay contest on railroad accounting. Consult your chief accounting officer, or the *Railway Age* of September 28, page 25, for complete details.

FINANCIAL, LEGAL & ACCOUNTING

Bernard G. Costello, chief clerk in the right of way and lease department of the CANADIAN PACIFIC, has been appointed right of way and lease agent for the Eastern region at Montreal, succeeding **John H. Forbes,** who has retired after 45 years of service. **Allan W. Blackler,** auditor of miscellaneous accounts at Montreal, has been appointed auditor of agencies, succeeding **Daniel A. McIntosh,** who has retired on pension after 42 years of service.

Charles E. Belt, statistician, traffic department, WESTERN MARYLAND, at Baltimore, has retired after 40 years of service. **Paul L. Overman,** auditor of traffic, accounting department, has retired after 39 years of service. **E. T. Pfeil** succeeds Mr. Overman as auditor of traffic and **V. L. Knecht** succeeds Mr. Pfeil as assistant auditor of traffic.

PURCHASES & STORES

Willie E. Martin, general storekeeper of the WESTERN MARYLAND at Hagerstown, Md., has retired after 50 years of service.

ENGINEERING

H. B. Christianson, assistant chief engineer of the MILWAUKEE at Chicago, has been appointed special engineer at that point.

R. E. Farmer, assistant district engineer of the Quebec district of the CANADIAN PACIFIC at Montreal has been appointed district engineer, succeeding **J. H. Reeder,** who has retired on pension after 41 years of service. **A. G. Hibbard,** engineer for the Montreal Terminals division, replaces Mr. Farmer, and **R. S. Allison,** division engineer at London, Ont., succeeds Mr. Hibbard.

J. Nelson Shaw, engineering assistant of the LEHIGH & HUDSON RIVER at Warwick, N.Y., retired at his own request September 30 after 45 years of service with that company.

James W. Wiggins, engineer maintenance of way of the MAINE CENTRAL at Portland, Me., has been promoted to chief engineer. **Charles D. Prentice** has been appointed engineer of track; **John F. Stanford,** signal engineer; and **James O. Born,** engineer of structures, all at Portland. Mr. Prentice was formerly division engineer of the NEW HAVEN in charge of road between New Haven and New York; Mr. Stanford was assistant engineer of the NEW YORK CENTRAL at Springfield, Mass., and Mr. Born was supervisor of structures of the RIO GRANDE at Grand Junction, Colo. **Harry Homans,** assistant division engineer of the MC, has been named division engineer in charge of all track from Waterville

James W. Wiggins

east, with headquarters as before at Bangor.

Mr. Wiggins was born at Houlton, Me., was graduated from the University of Maine in 1930, and joined the Erie that year as draftsman. After service with the MC as assistant engineer, the Bangor & Aroostook as superintendent of bridges and buildings and principal assistant engineer, and the Boston & Maine as assistant to chief engineer, Mr. Wiggins became engineer maintenance of way of the MC in February 1949.

R. J. D. Kelly, assistant construction engineer of the DELAWARE & HUDSON at Albany, N.Y., has been appointed construction engineer, succeeding **A. R. Morse,** who retired September 30. The position of assistant construction engineer has been abolished.

Rex Hoop, senior assistant engineer of the WESTERN MARYLAND at Baltimore, has retired after 43 years of service.

COMMUNICATIONS & SIGNALING

George H. Pescud, assistant general manager, communications, of the CANADAN PACIFIC, has been appointed general manager, communications, with headquarters as before at Montreal, succeeding **William D. Neil,** who has retired under the company's pension rules, after 48 years of service. **Leonard E. Hamson,** Eastern region general superintendent communications, succeeds Mr. Pescud. **L. A. Raymond,** superintendent communications, Ontario district, at Toronto, has been appointed general superintendent of eastern lines for the telegraph department at Montreal. **L. W. Neale,** superintendent communications, Algoma district, at Sudbury, Ont., has been transferred to the Saskatchewan district at Moose Jaw, to succeed **D. N. Macleod,** who replaces Mr. Raymond at Toronto. **W. G. Keating,** superintendent of traffic at Winnipeg, has been appointed Atlantic district superintendent at St. John, N.B., succeeding **H. W. Howard,** who replaces Mr. Neal at Sudbury.

OBITUARY

Patrick Edward Crowley, 89, who was president of the NEW YORK CENTRAL from 1924 to 1931, died October 1 at his home in Mt. Vernon, N.Y.

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Perhaps you saw this reflectoscope test in the Armco booth at the RSMA Exhibit Convention this year. If you did, you saw the first non-destructive test ever employed on wheels to reveal internal quality. It's done with a searching crystal and ultra sonic waves.

The electronic device literally puts its ear to the wheel rim and through sonic inspection finds any metallurgical defects that could lead to costly rim failure. The exact location of any defect is shown on the screen. The operator sees what the instrument hears.

Thorough inspection is especially important in the case of diesel wheels because the advent of the diesel locomotive has brought new and much more severe service conditions to wheels. For example stresses are higher and more complex; wheels drive and brake the locomotive, not just support it.

Armco research men who are checking the effectiveness of sonic testing are convinced of its reliability as a test method. Consequently, Armco recommends that all wheels for diesel service be required to pass sonic testing.

If you are interested in stronger, safer diesel wheels, let us supply you with sonic-tested wheels. Just drop us a line at the address below or phone the nearest Armco office.

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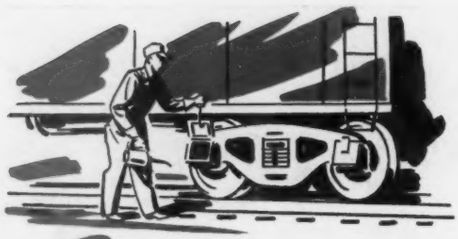
FREIGHT CAR SERVICING



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LOW-COST SOLID BEARINGS

How much time is given to train inspections . . . to what extent journal bearings are involved . . . what the present cost is—in man-hours and materials . . . and how better maintenance and available developments can further improve efficiency

FREIGHT CARS spend about 9 hours a day in yard movements—interchange between roads, classification, and switching to loading and unloading tracks. But according to reliable information the average train is held only 30 minutes or less for car servicing and inspection. *That's less than 6% of the yard moving time—and far less of the total time in movement or subject to movement.*

You couldn't eliminate this inspection—even if bearings were no concern at all. It includes too much other equipment—brake hoses and rigging, wheels, couplers, air valves, door seals, and many other items in addition to journal bearings. It takes an appreciable amount of time just to walk the cut of cars. So even though it takes some man-hours to inspect the bearings, chances are in the vast majority of cases this bearing inspection affects departure times scarcely at all . . . certainly hardly any more than would be the case with any other type of bearing.

What do these man-hours cost? Well, based on the number of packers and oilers required by one railroad, whose miles per hot box for 1952 was 3 times better than the national average, the annual cost per car owned for this labor is only about 3% of the cost of installing expensive non-standard bearings. That includes the labor for repacks, too. In fact, total cost per car owned per year for all labor *and materials* needed for routine solid bearing maintenance comes to less than the annual interest and depreciation on the huge investment necessary for non-standard bearings. So, when you take the high costs of periodic disassembly and inspection of non-standard bearings into consideration, it's obvious that solid bearings are by far the better buy.

How to Lick Hot Boxes and Cut Inspection Time

You can lick hot boxes best with low-cost solid bearing designs. Here are just three available improvements—each designed to increase bearing mileage and each adaptable to existing equipment:

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2. ***Twinplex Alarm Bearings***—Give smoke and odor indications should abnormal temperatures be reached, help detect failures before they become serious.

3. ***Magnus R-S Journal Stops and Packing Retainers***—Eliminate excessive axle displacement that causes waste grabs and spread linings. Keep the packing in place too—cut down man-hours for journal box servicing.

Combine these improvements with a program to upgrade maintenance standards and hot boxes will virtually disappear. And, of course, then you still retain all the inherent advantages of low-cost solid bearings.

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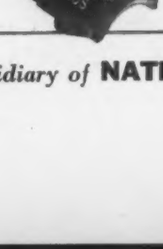

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